

UNIVERSITY OF TORONTO



3 1761 01297286 5





Digitized by the Internet Archive  
in 2008 with funding from  
Microsoft Corporation







palaeont

76

1

THE

AMERICAN

PALAEOZOIC FOSSILS:

A CATALOGUE

OF THE

GENERA AND SPECIES,

WITH

NAMES OF AUTHORS, DATES, PLACES OF PUBLICATION, GROUPS OF ROCKS IN WHICH  
FOUND, AND THE ETYMOLOGY AND SIGNIFICATION OF THE WORDS,

AND

AN INTRODUCTION

DEVOTED TO THE STRATIGRAPHICAL GEOLOGY OF THE PALEOZOIC ROCKS.

41894  
9/7/98

BY S. A. MILLER.

CINCINNATI, OHIO:

PUBLISHED BY THE AUTHOR, No. 8 W. THIRD ST.

1877.

RE

725

M55

---

Entered according to act of Congress, in the year 1877, by

S. A. MILLER,

In the Office of the Librarian of Congress, at Washington.

---

CINCINNATI TIMES COMPANY BOOK AND JOB ROOMS.



# PREFACE.

---

THE SCIENCE OF GEOLOGY rests upon the fossil contents of the rocks, and, therefore, there can be but little knowledge of the science without a knowledge of the fossils. Every one professes to take an interest in Geology, although the complaint against the technical names is quite general. This work may be regarded as a compilation of these technical names in alphabetical order, with the signification of each, and in this respect, it is a dictionary adapted to the use of every one, and designed to remove the objections against the hard words used in the science. The references to authors and publications are for the special benefit of the describers of fossils and the students of palæontology, while the Groups of rocks are given for the convenience of collectors and students generally. The general plan of the work will be, at once, apparent to the reader; a few remarks, however, in regard thereto, may not be inappropriate.

The state of the science, at this time, does not admit of a very great degree of certainty in the arrangement of Palæozoic Fossils into families; such arrangement must, therefore, be regarded as more or less provisional. And, in this work, where a class could not be arranged into families already limited and defined, with approximate correctness, the attempt has been omitted. No new families have been proposed, with the exception of three names, followed by the provisional interrogation point in the Class Echinodermata. The new family names in the Class Lamellibranchiata are used by Prof. James Hall in the fifth volume of the Palæontology of New York.

Each generic name is followed by the name of the author, the date of the first publication, the title of the book in which it first appeared, which is generally abbreviated, and the etymology of the word, which is included within brackets. Valid names are printed in Roman letters. Generic names, preoccupied, never defined, and where the fossils are unknown in American palæozoic rocks, or the names invalid for any other reason, are italicized. The generic name always begins with a capital letter, whether it is a valid or invalid name.

Each specific name, or as it was formerly, called the *trivial* name, is followed with the name of the author, the date of the first publication, the title of the book in which it appeared, which is generally abbreviated, the Group of rocks in which the fossil is found when the Group is known; but otherwise the formation alone is given, and the signification of the

name included within brackets. The name of the Group of rocks is generally abbreviated. Where the author, in the first instance, referred his species to the wrong genus, such generic and specific name is included within parenthesis immediately following the date of the publication. For instance, *Delthyris* is a synonym for *Spirifera*, and many species have been erroneously referred to it; such are written in this manner:

*Spirifera arenosa*, Conrad, 1838, (*Delthyris arenosa*), Ann. Rep. N. Y., Oriskany sandstone. [Sig. sandy.]

Specific names never begin with capital letters.

The author has endeavored to quote from the original publications, and for kindness and assistance in obtaining access to them, he expresses his obligations to Prof. James Hall, of Albany, New York; Mr. C. D. Walcott, of Trenton Falls, New York; Prof. Leo. Lesquereux, of Columbus, Ohio, and to Mr. Thomas Vickers, the able and efficient librarian of the public library in the city of Cincinnati. A few of the works cited, however, were not within reach, and the references to these are therefore second hand. In the attempt to make the catalogue of names complete, within the scope of the work, the author visited several libraries and otherwise used reasonable efforts for that purpose, but he has no doubt that a few names have been omitted. The number of names in the book is as follows:

Generic names in Roman letters, - - - -	1,000
Generic names in Italic letters, - - - -	200
Specific names in Roman letters, - - - -	8,000
Specific names in Italic letters, - - - -	2,000

Total number of genera and species, including synonyms, etc., - - - -	11,200
--	--------

Some of the authors of generic and specific names have not been familiar with the Latin and Greek languages, others have been careless in the exercise of their knowledge when forming the new words, and many names have been misprinted for want of careful proof-reading. For these and probably other reasons, the specific names under a single genus have been found with masculine, feminine, and neuter terminations; no uniformity has existed in the terminations added to proper names, and words have been otherwise incorrectly formed. So universally have these errors prevailed, that the author found in some Classes, twenty-five per cent. of the names defective. In a conversation with Prof. E. W. Claypole, of Antioch College, Yellow Springs, Ohio, (a gentleman thoroughly learned in the Latin and Greek languages) shortly before commencing the publication, with regard to the etymology of words, and the importance of following the laws of language in making the genders of the adjective specific names correspond with those of the generic terms, he very kindly proffered his assistance, for the purpose of making all proper corrections in this regard. Publication was commenced in February, and the proofs were sent to Prof. Claypole as rapidly as the

matter was put in type for his inspection and correction, but the matter was published so rapidly that it frequently went to press before the return by mail, of his proof. The greater part of the work, therefore, did not have the benefit of his revision.

As an illustration, the genus *Macrocheilus* has been considered masculine by all the authors, and consequently the specific names have been made masculine. As Prof. Claypole did not read the proof, the specific names are published here in the masculine, as the authors made them; but on his authority the species under the genera *Temnocheilus*, *Solenoccheilus*, etc., have been changed from the masculine to the neuter gender. It may be a question, however, whether usage has not made such genera masculine. No such doubt can arise in the case of the words ending in *nema* as, *Cyclonema*, *Loxonema*, *Dictyonema*, etc., which have been treated almost or quite uniformly by the authors as feminine; for *nema* is neuter, in both the Latin and the Greek languages, and there is no reason whatever, for using it as feminine. Where specific names have been formed in more genders than one under a single genus, there seems to be no responsibility in correcting the errors and making the specific names correspond in gender with the genus, and this has been done in several hundred instances in this work. Perfection, however, has not been reached in this publication, and for the purpose of rendering greater assistance in that regard, the "Index of Genera" has been made to indicate the gender of each genus, so that any one with a little knowledge of Latin can make the species conform in gender with the genus. The reader will know that generic names are usually coined from Greek words, and specific names from Latin words or proper names with Latin terminations.

In Latinizing specific proper names, no uniformity has ever existed, nor can the author claim to have accomplished it in this work. Some authors have used the terminations *ianus*, *iana* and *ianum*, while others have used *anus*, *ana* and *anum*. The first impression was that the former endings were proper, and consequently they were used in part of this work; but the best authors use only the latter, and upon reflection we were of the opinion that the latter endings are the proper ones, and they were thereafter used in this work exclusively. The reader is directed, therefore, to correct the proper names ending in *ianus*, *iana* and *ianum*, which occur, in some instances, from the Polypi to the Brachiopoda, by striking out the letter *i* and thus perfect this class of words.

Again, no uniformity exists in specific proper names put in the genitive case by adding the Latin ending *i*, where the proper names end in *e*, *y*, etc. There seems to be no difficulty where the proper name ends in a consonant, in accomplishing the desired purpose by adding a single *i*, and generally where words of more than one syllable end in *e*, the same purpose may be accomplished by changing the *e* to *i*; but there are words where positive difficulty exists, for instance; Case, Casey, White, Whity, Moor, Moore, Hoy, etc. Some would change the *e* into *i* in Moore

and add *i* to Moor, so that in each case we would have the same specific name *moori*, and so with White and Whity; but there are very strong reasons against such action. In this work, the words of one syllable ending in *e* have sometimes been written with an *i* added, and at other times made to end in *ii*, according to the rules of the British Association, as *casei* and *casii*. But the author is of the opinion that the single letter *i* in these words is to be preferred; thus *casei*, *caseyi*, *whitei*, *whityi*, *moori*, *moorei*, *hoyi*, etc., for the following reason. The use of such words is justified because the men have been in some way useful to the science, and the preservation of their names is part of the history of its growth, and can be defended with stronger reason than the use of mythological names, even within the limits warranted by the rules of the British Association, where a fanciful resemblance is made a test. A man may devote ten, twenty, or thirty years of his life to the collection of fossils, or he may devote as many years to the study and description of them. In either case his services may constitute the entire history of the fossils of a given locality, and in what way can the science be better subserved than by perpetuating his name among the fossils he discovered or defined? If the reason for the use of his name is a good one, it is equally strong to use it so that it will not be misunderstood, and can not be made to represent an individual of a different name. The fact that the name does not readily assume a Latin form is of slight weight, in the opinion of the author, compared with the preservation of the history of the science in perpetuating the names of those who have devoted themselves to discover and systematize it.

At the request of the author, Prof. Claypole has written an essay upon the rules of nomenclature, for this work, to which the reader is referred for further light in the construction of words.

# CONSTRUCTION OF SYSTEMATIC NAMES IN PALÆONTOLOGY.\*

By PROF. E. W. CLAYPOLE, B. A., B. Sc., (London), Antioch College, Yellow Springs, Ohio.

---

The Latin language is universally adopted in the scientific world for naming species, fossil and recent, in both the Animal and Vegetable Kingdoms. Linnaeus introduced the plan of limiting the name of a species to two words, the former of which was generic and the latter specific, and of making these terms in their formation comply with the rules of the Latin tongue. Since his time, this plan has become the rule. At first, terms were chosen expressing the character or characters which define the genus or species, and such names constitute the perfection of scientific nomenclature. But even Linnaeus soon found it impossible to maintain this standard, and himself resorted to Homer's *Iliad* to find names with which to christen the butterflies that thronged in upon him. Hence we have *Troilus*, *Danaus*, *Philenor*, &c. Such names are mere arbitrary, meaningless counters attached to the objects and only tenable by an act of memory. They recall no character and are recalled by none. Hence they are inferior to the former class of names. But if in Linnaeus' day their necessity was evident, much more so is it to-day, when almost every language and lexicon have been ransacked to find unpreoccupied names for the hosts of natural objects for which they are required. In some large genera, such for instance as *Orthoceras*, *Orthis* and *Rhynchonella*, it has become exceedingly difficult to coin descriptive names which have not been already thrown into circulation by some other author. This will be evident to any reader in the number of specific names in the catalogue marked "preoccupied," and one object is to provide a remedy for the difficulty by enabling any one to see at a glance whether or not any proposed name has been previously published by any American, and to some extent, by any European author.

The conventional Latin of the Sciences differs somewhat from the classical Latin of the schools. As a dead language, Latin is free from the changes to which all living languages are subject, and as the most widely studied of the dead languages, it forms an excellent means of communication between men of science in different countries. Words and combinations of letters have, however, been introduced alien to the genius of the language, and some of them most barbarous and unmusical.

---

\*NOTE.—This paper has been prepared at the request of Mr. S. A. MILLER, the author of the *AMERICAN PALEOZOIC FOSSILS*, and with the view of giving some assistance to paleontological students and workers, in avoiding errors and improving the nomenclature of science. E. W. C.

Indeed their introduction cannot well be opposed, as they often offer useful characters. But the laws of Latin should nevertheless control their formation. They should be made, as nearly as possible, what the Roman would have made them had they been introduced from outside into the language while yet living. In this way no violence is done to it, and in all countries words will be formed in a similar manner.

In the year 1862, a committee of the British Association for the Advancement of Science, published a set of rules and recommendations on the subject of Scientific nomenclature, the former of which may be said to be a summary of the practice of the best scientific writers in all lands, and therefore binding, and the latter have been, with a few exceptions, almost universally adopted. Thus, alluding to the point above mentioned, the committee in its "Recommendations" says:

*b. Barbarous names.*—Some authors protest strongly against the introduction of exotic words into our Latin nomenclature; others defend the practice with equal warmth. We may remark, first, that the practice is not contrary to classical usage, for the Greeks and Romans did occasionally, though with reluctance, introduce barbarous words in a modified form into their respective languages. Secondly, the preservation of the trivial names which animals bear in their native countries is often of great use to the traveler, in aiding him to discover and identify species. We do not, therefore, consider, if such words have a Latin termination given to them, that the occasional and judicious use of them as scientific terms can be justly objected to.

In addition to drawing up a mere list of the North American Palæozoic Fossils, an attempt has been made to give some help to the many workers in the palæontological field towards rightly naming their fossils at the outset. A mistake once in print is very difficult to eradicate. It reappears, it crops out in some unexpected place and with every reappearance has a new lease of life. Few who have not made some study of the subject have any conception of the confusion now existing in the nomenclature of science. The errors are of two kinds—scientific and grammatical. To such a length has synonymy or the giving of different names to the same species now arrived, that it not unfrequently happens that the common English name is more definite and vivid, and therefore more useful than the Scientific. Read, for instance, the twelve different names which have been given to the common Chain Coral, from Fougé, in 1765, to Bronn, in 1835. This, in many cases, arises from mistaken identification, which with all care must sometimes happen, but it arises in a still greater degree from the impossibility of learning what species have been found and what names have been given, when they were given and by whom.

Another source of confusion is the erroneous nomenclature often adopted. All whose duty calls them to the study of palæontology are not, and cannot be, classical scholars, and consequently not a few names are formed in violation of the recognised rules of language. Some errors of this kind have been corrected and a few rules are appended to aid in preventing others.

*c. Corrupted words.*—In the construction of compound Latin words, there are certain grammatical rules which have been known, and acted on for two thousand years, and



which a naturalist is bound to acquaint himself with before he tries his skill in coining zoological terms. One of the chief of these rules is, that in compounding words, all the radical or essential parts of the constituent members must be retained, and no change made except in the variable terminations. But several generic names have been lately introduced which run counter to this rule, and form most unsightly objects to all who are conversant with the spirit of the Latin language. A name made up of the first half of one word, and the last half of another, is as deformed a monster in nomenclature as a mermaid or a centaur would be in zoology; yet we find examples in the names *Corcorax*, (from *Corvus* and *Pyrhocorax*), *Cypsnagra* (from *Cypselus* and *Tanagra*), *Merulaxis* (*Merula* and *Lynallaxis*), *Loxigilla* (from *Loxia* and *Fringilla*), etc. In other cases, when the commencement of both the simple words is retained in the compound, a fault is still committed by cutting off too much of the radical and vital portions, as is the case in *Bucorvus* (from *Buceros* and *Corvus*), *Ninox* (*Nisus* and *Noctua*), etc.

1. *Adjective generic names.*—The names of genera are, in all cases, essentially substantive, and hence adjective terms can not be employed for them without doing violence to grammar. The generic names of *Hians*, *Criniger*, *Cursorius*, *Nitidula*, etc., are examples of this incorrect usage.—*Recommendations.*

If a writer is unable to coin such a generic term without falling into these or other errors, it would be wise to abandon the attempt and form one in another manner.

#### RULES FOR THE FORMATION OF NEW NAMES IN PALÆONTOLOGY.

a. *Gender of generic terms.*—A generic name should always be of that gender which the laws of the language from which it is taken demand. Definite rules cannot well be laid down, because the practice of various languages differs on this point. In general, where no change is made in the termination of the word which forms the end of a new name, the gender of that word will determine that of the name. Thus, the words, *stoma*, a mouth, and *ceras*, a horn, are both, in Greek, of the neuter gender; and, consequently, all the many compounds ending with these words, such as *Orthoceras*, *Platystoma*, etc., must be of that gender also, and have corresponding specific adjective terms. If the first founder of a genus were to take the pains to ascertain the right gender of his new name, and make his adjective terms accordingly, many errors would be avoided, for subsequent authors, apparently without a thought, in establishing a new species, coin a specific name of the same gender as that originally published, and thus perpetuate and increase error. For example, the word *desma*, a bond, like almost all Greek words ending in *ma*, is of the neuter gender; and yet, in a work standing so high as Woodward's *Mollusca*, we find *Lyrodesma plana*, followed shortly afterwards by *Cochlodesma praetenuae*.

b. *Gender of specific terms.*—Every specific name must agree in gender with that of the genus to which it belongs; and yet, owing to the above and several other causes, this rule is incessantly overlooked or violated, even by writers whose classical attainments are beyond doubt. In few, if any, large genera do we fail to find two, if not all, the three genders among the specific names. For instance, in the genus *Receptaculites* we have *Receptaculites fungosum*, *R. globulare*, *R. formosus*, *R.*

*reticulata*. Such terms, being mere errors, pure and simple, and involving no disputed or debatable point, may be reduced to accord without difficulty.

c. *Latin and Greek terminations*.—The addition of these terminations to old words often requires a previous change in those words the following rules are offered as some assistance to those whose time does not allow the consultation of authorities, scientific and linguistic. It is not always easy for even a classical scholar to determine off-hand how the Greeks or Romans would have made a word, had it been coined by them while their languages were still living. Much examination and collection of examples is necessary before certainty can be reached, and in a few cases some doubt may then remain. These cases are, however, very few, especially as the terminations employed in palæontology are not numerous. The following rules will probably suffice to enable any one with an elementary knowledge of the classic tongues to form correctly a new specific term, but nothing can give full immunity from risk of error where some such knowledge is not possessed.

—*alis*. This Latin termination, implying resemblance, is seldom used, except in words already compounded in Greek and Latin, and when otherwise, it must be annexed to the stem of the word, as *rectilateralis*, *quadrilateralis*.

—*anus*. This Latin termination implies resemblance or association, and may be added to proper names, personal or local; though in science its use is almost confined to the former. If the word be capable of taking a classic form, the termination should be simply annexed to the stem as *Linnaeus*, *linnaeanus*; *Lesquereux*, (*lescuria*) *lescurianus*; in conformity with classic usage; *pagus*, *paganus*; *Claudius*, *claudianus*; *Neapolis*, *neapolitanus*. In other cases, the addition of this termination must follow the same rule as those for *ensis*, as *America*, *americanus*; *Geinitz*, *geinitzanus*; *Meek*, *meekanus*; *Erie*, *erianus*; *Italy*, (*ia*) *italianus*.

—*atus*. This Latin termination strictly implies the possession of the thing to the name of which it is added. It is, therefore, affixed to the stem of common names only, as *costa*, *costatus*; *galea*, *galeatus*; *fornix*, *fornicatus*; *sinus*, *sinuatus*; *stria*, *striatus*, *lobus*, *lobatus*; *rostrum*, *rostratus*. It is worthy of remark here that this termination sometimes loses its *at*, to shorten the word. The practice is not commendable from a linguistic standpoint, but some of the terms so made have become fixed in the nomenclature, as *Orthis biloba*.

—*formis*. This Latin termination implies resemblance of shape, and should be confined to Latin words, to the stem of which it should be joined by the connecting vowel *i*, as *laterna*, *laterniformis*; *pistillum*, *pistilliformis*. In forming terms, such as the first given above from Latin words ending in *a*, the error of using *ae* as the connecting vowel should be avoided; being inconsistent with classic usage, as well as more awkward and lengthy, thus we have from *terra*, *terricola*; *gemma*, *gemmifer*; *squama*, *squamiger*; *tuba*, *tubiformis*; etc.

—*ensis*. This is a Latin termination, expressive of locality, and cannot, therefore, be correctly employed except as an affix to the name of a place. This rule has been traversed in few real, but in many apparent instances. *Lingula morsensis* is an illustration of the former. In accordance with law this has been changed to *L. morsi*, being given in honor of Mr. Morse. *Zygospira cincinnatiensis*, *Pupa vermillionensis*, *Cardium napoleonense*, *Athyris hannibalensis* are apparent exceptions; but these terms are formed from words, which, though originally personal or trivial, have now become local names, and consequently no valid objection can be raised against them. In using this termination the following rules have been generally followed, and are therefore adopted here. The exceptions are very few, and have been reduced into conformity: 1st. If the name of the place ends in a consonant the termination is annexed to the word, as *Clinton*, *clintonensis*. 2d. If the name ends in *a* or *e*, these letters are dropped and the termination then annexed, as *Canada*, *canadensis*; *Nebraska*, *nebrascensis*; *Minnesota*, *minnesotensis*; *Iowa*, *iowensis*; *Indiana*, *indianensis*; *Lasalle*, *lasallensis*; *Erie*, *ericensis*. 3rd. If the name ends in *i*, *o* or *u*, that vowel is retained, as *Mississippi*, *mississippiensis*; *Missouri*, *missouriensis*; *Chicago*, *chicagoensis*; *Colorado*, *coloradoensis*; *Chouteau*, *chouteauensis*. 4th. If the name ends in *y*, that letter becomes *i* upon the addition of the termination, as *Kentucky*, *kentuckiensis*; *Alleghany*, *alleghaniensis*; in accordance with classic usage, as *Sicily*, *siciliensis*.

—*i*. The termination *i* is to be considered a mere indication of the Latin genitive case, and custom, rather than correctness, has, in some sense, legalized its addition to any name. In practice, however, it is almost restricted to proper names. Thus we have *Knighti*, *Littoni*, *Flemingi*, *Ivesi*. The Rule of the British Association on this matter runs thus: "In Latinizing proper names, the simplest rule seems to be to use the termination *us*, genitive *i*, when the name ends with a consonant, and *ius*, gen. *ii*, when it ends with a vowel."

—*icus*. This Greek termination implies resemblance and may be added to common names, under the same rules as those given for—*ensis*, except that in forming the word, a vowel is suppressed if it would precede the termination; thus, *Macedon*, *macedonicus*; *Italy* (*ia*), *italicus*. It is little used, except in words already existing, as *ellipticus*, and, therefore, needs no further notice.

—*eus*. This Latin termination has been occasionally employed, but as it implies "made of," it is evidently seldom, if ever, admissible in palæontology. The term *eboraceus*, from *eboracum*, the Latin name for York, is a misnomer and should have been *eboracensis*.

—*idae*. This Greek patronymic has come into general use as a convenient termination to express the resemblance running through a family.

B. It is recommended that the assemblages of genera, termed *families*, should be uniformly named, by adding the termination *idae* to the name of the earliest known, or most typically characterized genus in them; and that their subdivisions, termed *subfamilies*,

should be similarly constructed, with the termination *inæ*. These words are formed by changing the last syllable of the genitive case into *idæ* or *inæ*, as *strix*, *Strigis*, *Strigidæ*, *Buceros*, *Bucerotis*, *Bucerotidæ*, not *Strixidæ*, *Bucæidæ*.—[Recommendations.

It should be borne in mind that in the termination *—idae*, the *i* is short, but in *—inae* it is long.

*—inus*. This Latin termination is of wider application and classic usage sanctions its application to both common and proper names, though less commonly to the names of persons. Latin usage, however, restricted its application more than modern scientific practice has done, and applied it mainly to proper names, local terms and living beings; as *caninus*, *alpinus*. Hence, such words as *rugatinus*, *sulcatinus*, *secalinus*, *taxinus* and *velutinus* are at best suspicious if not illegitimate. This termination, however employed, is subject to the laws given under *—ensis*.

*—ites*. This termination was early adopted by naturalists to express the fossil nature of the specimen and so prevent confusion, while at the same time expressing resemblance to some existing genus or species. It is a contraction of the Greek word *lithos*, a stone. In most instances, however, it coalesces with the last vowel of the root and becomes long in compensation. This and long usage in many words, such as *Ammonites*, *Belemnites*, *Pyrites*, have completely established the long *i*, while the gender is determined by that of the Greek word to be masculine. All specific terms in the genus must, therefore, be of this gender.

*—oides*. This Greek termination, signifying "like," should be added only to the stems of words of Greek origin. No connecting vowel is necessary, as one already exists in it. Thus we have *dactylos*, *dactyloides*; *discos*, *discoides*. A Latin form is often used, *—oideus*, which, however, obeys the same laws; except that the Greek termination is alike in all genders, while the Latin is inflected as Latin adjectives of similar termination.

*d. Compound terms*.—In forming compound terms as generic or specific names, care should be taken to connect them rightly. If an adjective of three terminations or a noun of the second Latin declension composes the former part of the word, either *i* or *o* may be employed as a connecting vowel, the choice being largely determined by the ear. Thus *sulco-marginatus* is better than *sulci-marginatus*, and *crassicaulis* than *cras-socaulis*. If, however, the adjective has but one or two terminations, or the noun be of the first, third or fourth Latin declension, the connecting vowel *i* should always be employed as *tenuistriatus*, *pinniformis*, *ilicifolius*, *retiformis*, *cornifer*. The connecting vowel *o* is admissible by Greek usage in all declensions, as *Ulodendron*, *Cycloconcha*, *Syringodendron*, *Alethopteris*, *Dictyonema*, *Dictyopteris*, except that where the first part of the word is an adjective ending in *—ys*, it is shorter and at the same time consonant with classic usage to employ no connecting vowel at all; thus, *pachyderma*, *euryteines*, *oxynotus*, *Platystoma*, etc., are better than *pachyoderma*, *euryoteines*, *oxyonotus*, *Platyostoma*, etc.

*e. Spelling of new names*.—

In writing zoological names, the rules of Latin orthography must be adhered to.

In Latinizing Greek words, there are certain rules of orthography known to classical scholars which must never be departed from. For instance, the names which modern authors have written *Aipuknemia*, *Zenophasia*, *poioccephala*, must, according to the laws of etymology, be spelt *Æpycnemia*, *Xenophasia*, and *pœcephala*. In Latinizing modern words, the rules of classic usage do not apply, and all that we can do is to give to such terms as classical an appearance as we can, consistently with the preservation of their etymology. In the case of European words, whose orthography is fixed, it is best to retain the original form, even though it may include letters and combinations unknown in Latin. Such words for instance as *Woodwardi*, *Knighti*, *Bullocki*, *Eschscholtzi*, would be quite unintelligible, if they were Latinized into *Vudvardi*, *Cnichti*, *Bullocci*, *Essolzi*, etc. But words of barbarous origin, having no fixed orthography, are more pliable, and hence, when adopted into the Latin, they should be rendered as classical in appearance as is consistent with the preservation of their original sound. Thus, the words *Tockus*, *awsuree*, *argoondat*, *kundoo*, etc., should, when Latinized, have been written *Toccus*, *ansure*, *argunda*, *cundu*, etc. Such words ought, in all practicable cases, to have a Latin termination given them, especially if they are used generically.

This rule, with its limitations and exceptions has been not seldom departed from in naming fossils. Many names have gained currency, which are needlessly unclassical. At the same time, we meet with marked examples of compliance. Such names as the following stand out prominently—*sancti ludovici*, *cestriensis*, are far more correct and pleasing than *louisi* and *chesterensis*, *lescuriae* or *lescuri* than *lesquer-euxi*, while *Lepidophloios*, of Sternberg, should be spelled *Lepidophloeus*, in accordance with Latin rather than Greek custom.

It is almost unnecessary to add that when a new term is derived from sources purely classical, care should be taken to spell it accurately, and not to disguise or conceal its origin by any attempts to eliminate a letter or two. This, however, has been sometimes done, as for instance, in the name *Stenocisma*, Conrad, (in which the etymology is masked by the misspelling) and which will be found written *Stenoschisma*.

*f. Mythological names.*—In regard to the numerous mythological names, especially those given by the late palaeontologist, to the Canadian Survey, Mr. E. Billings, the following recommendations of the British Association deserve notice:

*d. Mythological or historical names.*—When these have no perceptible reference or allusion to the characters of the object on which they are conferred, they may be properly regarded as unmeaning and in bad taste. Thus, the generic names *Lesbia*, *Leilus*, *Remus*, *Corydon*, *Pasiphæ*, have been applied to a humming-bird, a butterfly, a beetle, a parrot, and a crab, respectively, without any perceptible association of ideas. But mythological names may sometimes be used as generic, with the same propriety as technical ones, in cases where a direct allusion can be traced between the narrated actions of a personage and the observed habits or structure of an animal. Thus, when the name *Progne* is given to a swallow, *Clotho* to a spider, *Hydra* to a polyp, *Athene* to an owl, *Nestor* to a grey-headed parrot, etc., a pleasing and beneficial connection is established between classical literature and physical science.—*Recommendations.*

Mr. Billings was, probably, led to adopt the practice by the increasing difficulty of finding unpreoccupied names and an unwillingness to encumber the science with more synonyms.

*g. Personal names.—*

*g. Specific names derived from persons.*—So long as these complimentary designations are used with moderation, and are restricted to persons of eminence as scientific zoologists, they may be employed with propriety in cases where expressive or characteristic words are not to be found. But we fully concur with those who censure the practice of naming species after persons of no scientific reputation, as curiosity dealers (e. g. *Caniveti Boissoncauti*), Peruvian priestesses (*Cora amazilia*), or Hottentots (*Klassi*).

*h. Generic names derived from persons.*—Words of this class have been very extensively used in botany, and therefore it would have been well to exclude them wholly from zoology, for the sake of obtaining a *memoria technica* by which the name of a genus would at once tell us to which of the kingdoms of nature it belonged. Some few personal generic names have, however, crept into zoology, as *Cuvieria*, *Mulleria*, *Rossia*, *Lessonia*, etc., but they are very rare in comparison with those of botany, and it is, perhaps, desirable not to add to their number.—*Recommendations.*

Another objection to this kind of name, so many of which have crept into palæontological nomenclature of late years, is that they yield with difficulty, in many instances, to the plastic hand of the classical linguist. The collector or student who stands godfather to a newly discovered fossil, and seeks immortality for some friend or acquaintance by making it his namesake, naturally wishes to keep the name as little changed as possible, lest his purpose should in part fail. On the other hand the classical scholar would rather see the name reduced in some degree to Latin form so that it may offend the eye and ear as little as possible. Between these two a contest arises, and hence we have various forms for words which should be alike, as *Barrandi*, *barrandei*; *Moori*, *moorei*. Perhaps in this respect it would be wisest to adopt the recommendations of the British Association Committee, quoted on page xi, with a slight modification, and add *i* for a genitive case where the name ends in a consonant, in *a*, *o* or *u*, and *ii* when it ends in *e*, *i* or *y*, omitting in the latter case the final vowel of the name.

*h. Nouns as specific terms.*—In those cases, and they are numerous, where a noun is used as a specific name, no change can be made in its termination. Hence, however, inconsistent it may appear to some to see *Orthis biloba* and *Orthis circulus*, *Productus cora* and *Productus costatus*, side by side, such combinations are accurate. It may, however, be added that adjective terms are preferable, whenever possible.

*i. Inelegant names.*—With the following extract we leave this part of our subject:

*Names of harsh and inelegant pronunciation.*—These words are grating to the ear, either from inelegance of form, as *Huhua*, *Yuhina*, *Cracirex*, *Eschscholtzia*; or, from too great length, as *chirostrongylostinus*, *Opetiorhynchus*, *brachypodioides*, *thecodontosaurus*, not to mention the *Eualiolimnosaurus crocodilocephaloides* of a German naturalist. It is needless to enlarge on the advantage of consulting euphony in the construction of our language. As a general rule it may be recommended to avoid introducing words of more than five syllables.

We have now pointed out the principal rocks and shoals which lie in the path of the nomenclator, and it will be seen that the navigation through them is by no means easy. The task of constructing a language which shall supply the demands of scientific accuracy on the one hand, and of literary elegance on the other, is not to be inconsiderately undertaken by unqualified persons. Our nomenclature presents but too many flaws and



inelegancies already, and as the stern law of priority forbids their removal, it follows that they must remain as monuments of the bad taste or bad scholarship of their authors to the latest ages in which zoology shall be studied.

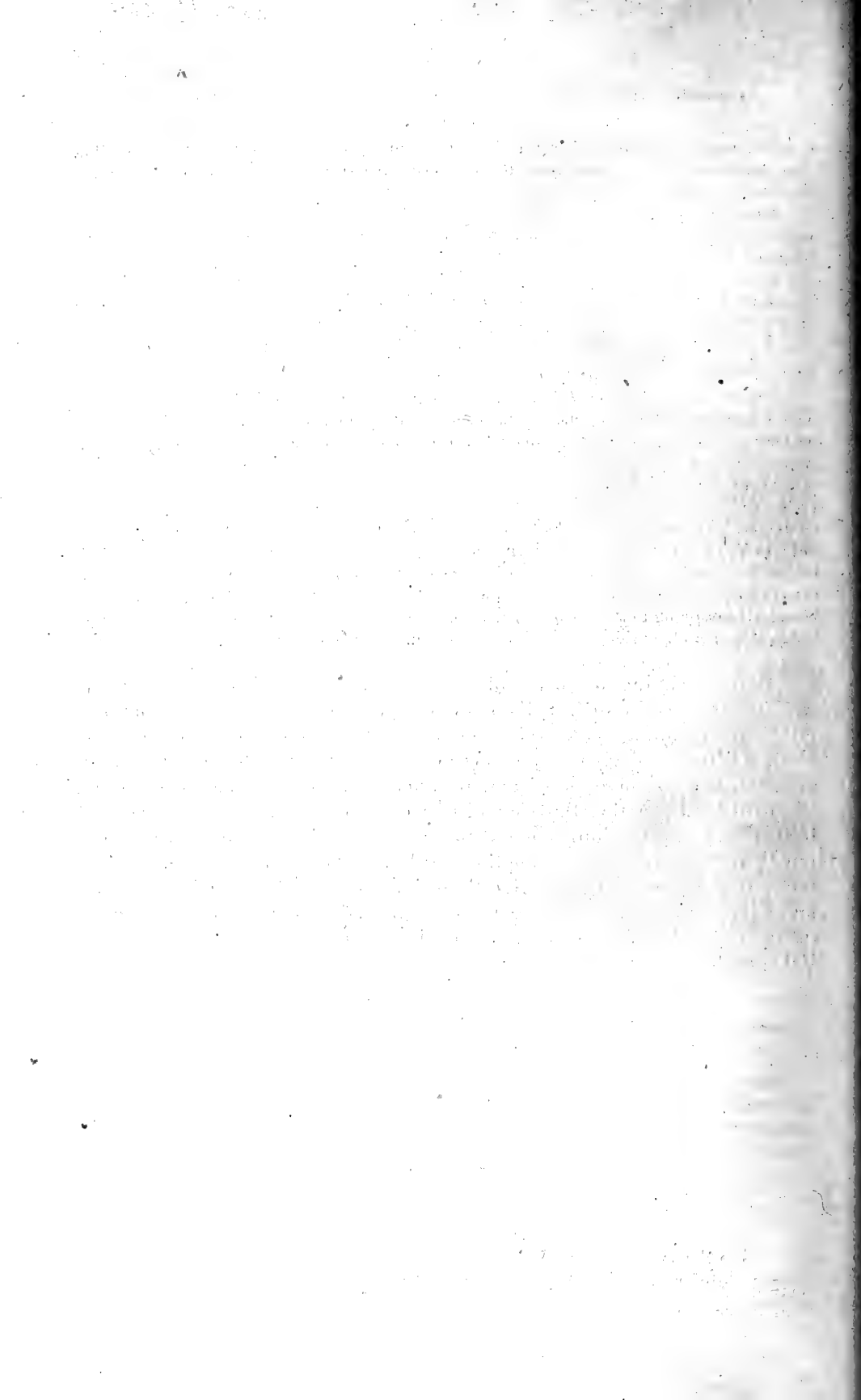
*Etymologies and types of new genera to be stated.*—It is obvious that the names of genera would, in general, be far more carefully constructed, and their definitions would be rendered more exact, if authors would adopt the following suggestion:

It is recommended that in defining new genera, the etymology of the name should be always stated, and that one species should be invariably selected as a type or standard of reference.

The following extract, from the same code, also bears on the point in question:

*Nonsense names.*—Some authors having found difficulty in selecting generic names which have not been used before, have adopted the plan of coining words at random, without any derivation or meaning whatever. The following are examples: *Viralva*, *Xema*, *Azeca*, *Assiminia*, *Quedius*, *Spisula*. To the same class we may refer *anagrams* of other generic names, *Dacleo* and *Cedola* of *Alcedo*, *Zapornia* of *Dorzana*, etc. Such verbal trifling as this is in very bad taste, and is especially calculated to bring the science into contempt. It finds no precedent in the Augustan age of Latin, but can be compared only to the puerile quibblings of the Middle Ages. It is contrary to the genius of all languages, which appear never to produce new words by spontaneous generation, but always to derive them from some other source, however distant or obscure. And it is peculiarly annoying to the etymologist, who, after seeking in vain through the vast store-house of human language for the parentage of such words, discovers at last that he has been pursuing an *ignis fatuus*.

Besides having often to follow such will-o'-the-wisps, any student who undertakes the task, will soon find it no easy one to ferret out the origin and meaning of veritable scientific names, often made up without distinct allusion to any conspicuous character of the fossil in question, and, occasionally, by men whose acquaintance with the languages is of the slightest kind. After all, care and pains, not a few malformed words and barbarous terms too long current to be now withdrawn from circulation, must ever remain, as corresponding words survive in our common English tongue; marking some age of folly or ignorance in by-gone days of the language. Such terms will serve as memorials, fossil relics, to show to future times the freaks of linguistic development in the early days of Palæontology.



## INTRODUCTION.

---

The most ancient rocks known to man had their immediate origin in sedimentary deposition at the bottom of an ocean. At this point commences Geology; for previous to this period nothing has been ascertained as to the condition of the Earth. It commences at the base of the lowest rocks discovered, and from thence it investigates the overlying strata, the changes that have taken place, the lapse of time, and the development of animal life, down to the present moment.

Were it possible to obtain a transverse section of these rocks at their maximum thickness, at any particular locality, there would be presented to the view an exposure of more than thirty miles, representing the geological column, which is regarded as one continuous whole, from the base to the top.

Geologists have adopted various divisions and subdivisions of this column, for the purpose of illustrating the different aspects of the science. But that which subdivides it into groups seems to be the most natural and systematic, and is the classification now generally preferred.

In the infancy of geological science, the known strata were divided into formations, each of which was supposed to represent a geological period, during which no marked changes occurred in the condition of the Earth or in its organic life. The commencement of each formation was supposed to mark a new epoch of creation, and its close to represent a great cataclysm that destroyed all vegetable and animal organisms. Modern geologists, however, have determined that the evidence of special creations and cataclysms is entirely wanting, and that the formations do not mark geological periods of repose, nor are they any more distinct in their character, from each other, than are the groups into which they have been subdivided.

The palæozoic rocks, as understood by geologists, embrace the Permian group, and all that is below it. The subdivision into Archæan, Silurian, Devonian and Carboniferous formations is retained as a matter of convenience, for the purpose of directing attention, in a general way, to a particular quarter of these rocks. The Archæan (most ancient) are the metamorphic rocks. The Silurian is next in order. The Devonian, from Devonshire, England, is a much smaller formation, and is characterized by its fish remains. The Carboniferous formation, so-called from the fact that it contains the great coal deposits of Europe, concludes the series of palæozoic rocks. Other formations contain coal deposits, but they are otherwise so distinct, that they are never in danger of being classed with this formation as originally defined.

The names used in American Geology, for the purpose of the classification of the strata into groups, have been derived, generally, from the localities at which the rocks have been studied and described. This method of nomenclature is preferred to any other, because the name itself can never mislead as to the mineral structure or relative position of the rocks, and the geologist may visit and study the locality with the certainty that he is investigating the typical group. Prof. Rogers conceived the idea of improving the nomenclature of the palæozoic rocks by dividing them into fifteen parts and giving them names significant of their relative ages. This he did by using words suggesting metaphorically different parts of a day, as follows: Primal, Auroral, Matinal, Levant, Surgent, Scalent, Premeridian, Meridian, Post Meridian, Cadent, Vergent, Ponent, Vespertine, Umbral and Seral, meaning respectively the formations of the Dawn, Daybreak, Morning, Sunrise, Mounting Day, Climbing Day, Forenoon, Noon, Afternoon, Declining Day, Descending Day, Sunset, Evening, Dusk and Nightfall. Unfortunately for his attempt to substitute another, for the geographical nomenclature then quite well established and susceptible of indefinite expansion, without the use of conflicting terms or words that could mislead the student, there were several extensive groups of rocks full of the remains of animal life, as yet unexplored, and consequently quite unknown to his system. For obvious reasons the nomenclature suggested by Mr. Rogers has not been adopted, and in all probability never will be.

The Archæan formation is divided into the Laurentian and Huronian groups. The Laurentian series of metamorphic rocks forms the base of the geological column, and has an estimated thickness in Canada of 32,750 feet. It takes its name from the Laurentian mountains of Canada. The *Eozoon canadense*, a fossil Rhizopod, is found at the base of the Grenville band of limestone, which is near the middle of this series. The estimated depth of the Laurentian series to the lowest place at which this fossil has been found is 16,500 feet. Sir W. E. Logan describes the Grenville band as follows:

"The general character of the rock connected with the fossil produces the impression that it is a great foraminiferal reef, in which the pyroxene masses represent a more ancient portion, which having died, and become much broken up, and worn into cavities and deep recesses, afforded a seat for a new growth of foraminifera, represented by the calcareo serpentinous part. This in its turn became broken up, leaving, however, in some places, uninjured portions of the organic structure. The main difference between this foraminiferal reef, and more recent coral reefs, seems to be, that while with the latter are usually associated many shells and other organic remains, in the more ancient one the only remains yet found are those of the animal which built the reef."

The next series of rocks overlying the Laurentian is called the Huronian, which, on the north shore of Lake Huron and to the eastward, consists of quartzites, chloritic slates, bands of limestone chert, jasper and slate conglomerates, not less than 18,000 feet in thickness.

On Lake Superior, Sault Ste. Marie, Mamainse, and other places, it is exposed from 10,000 to 16,208 feet in thickness. An approximate estimate of the thickness of this series on Michipicoten Island, says Mr. McFarlane, is 18,500 feet. And if we compare the rocks of Michipicoten Island with those of

Mamainse, it would appear that the lower rocks of the latter series do not come to the surface at Michipicoten Island, and that the higher rocks of the Michipicoten series have not been developed at Mamainse, or lie beneath the waters of the lake to the southwest of the promontory. It would, therefore, appear just in estimating the thickness of the upper copper-bearing rocks of the eastern part of Lake Superior (which are Huronian), to add to the Mamainse series the above-mentioned 4,000 feet of resinous traps, or porphyrites, which would make the whole thickness at least 20,000 feet. (Geo. of Can., 1863, pp. 55, 67, 86; Geo. of Can., 1866, pp. 132, 141.)

In addition to the *Eozoon canadense*, only a few fossil species have been described from the Huronian rocks, and these have been placed in genera of uncertain affinity, to wit: *Aspidella*, *Stenotheca*, and *Scenella*.

The metamorphic strata, equivalent to the Laurentian and Huronian series of Canada are described in Safford's Geological Survey of Tennessee, as many thousand feet thick. Fossil remains of foraminifera have been found in them. They have also been found in the metamorphic rocks of Europe; so that these rocks are no longer called azoic.

Next above the Archæan subdivision lies the great Silurian formation, first determined by Sir R. L. Murchison, and named in memory of the ancient Silures, who inhabited Wales, where he first studied the exposure of the rocks. He subdivided it into the Lower Silurian and Upper Silurian formations, and these names have been adopted in this country. The Lower Silurian is much the most extensive, and is divided into groups or subdivisions, in ascending order as follows:

1. The St. John's Group, consisting of black shales and sandstones, resting conformably upon older schistose rocks, at St. John's, New Brunswick, 3,000 feet thick. (Geo. of Can., 1866, p. 235.)

This Group of rocks contains the remains of Paradoxides, Conocephalites, Arionellus, Microdiscus, Agnostus, Orthis, and other fossil genera. The Paradoxides beds near Boston are supposed to belong to it.

2. The Potsdam Group, which takes its name from Potsdam in Northern New York, where it is well developed, and consists of a fine-grained, even-bedded sandstone, traversed by parallel joints. The Potsdam Group is sometimes divided into Upper Potsdam and Lower Potsdam Groups. The sandstones and limestones on the north shore of Belle Isle, and the rocks which, in the State of Vermont are called the Georgia slates, and the red sand-rock, belong to the Lower Potsdam Group. The Upper Potsdam Group is displayed in Minnesota, Wisconsin, New York, Pennsylvania, and other States. In Tennessee the Potsdam Group is divided into three great sub-groups, in ascending order as follows:
  1. The Ocoee conglomerate and slates;
  2. Chilhowee sandstone;
  3. Knox Group.The Ocoee conglomerate and slates takes its name from Ocoee river, and is 10,000 feet thick. The Chilhowee sandstone takes its name from the Chilhowee Mountain, and is 2,000 feet thick. The Knox Group takes its name from Knox county, and is 7,000 feet thick; making the total thickness of the Potsdam in Tennessee 19,000 feet. It is from 500 to 2,500 feet thick in Canada, 2,020 at Bonne Bay, Newfoundland, 1,147 feet at the Straits of Belle Isle, about 2,000 feet in Pennsylvania and West Virginia, and from 600 to 800 feet thick in Wisconsin and Minnesota.

The fossils which chiefly characterize the Potsdam Group belong to the genera *Palæophycus*, *Scolithus*, *Archæocyathus*; *Obolella*, *Camarella*, *Dinobolus*, *Lingulella*, *Salterella*, *Bathyrus*, *Conocephalites*, *Olenellus* and *Dicelloccephalus*. *Gasteropoda* and *Cephalopoda* first make their appearance in the Upper Potsdam. Poor specimens of *Cystidea* and *Crinoidea* have been found in this Group.

3. The Calciferous Group, named from the calcareo-silicious character of the rocks. It was called the Calciferous sandrock and Transition rock by Eaton, and the Barnegat limestone, Newburgh limestone, Warwick limestone, Oolitic limestone, Fucoidal layers, and slaty limestone, in the early Geological Reports of New York. It is divided into the Lower and Upper Calciferous Groups. The Upper Calciferous is found in Newfoundland about 1,000 feet in thickness. The Lower Calciferous is the original Calciferous Group of New York. It is exposed in Minnesota, Wisconsin, Tennessee, Missouri, Pennsylvania, Virginia, Canada, and other places, usually less than 500 feet in thickness. It is found, however, in Missouri 1,315 feet thick, where it is subdivided into 1st, 2d, 3d and 4th Magnesian limestone, and in Newfoundland 1,839 feet thick. The St. Peter's sandstone of the Northwest, named from its great development on the St. Peter's river, belongs to this group. There is in Newfoundland an important series of strata, having a thickness of 2,061 feet, known as division N. of the Newfoundland rocks, which should probably be regarded as part of the Upper Calciferous Group. If so, it would give us a maximum thickness of about 4,000 feet for the Calciferous Group.

The Lamellibranchiata first make their appearance in this Group, while the *Gasteropoda* and *Cephalopoda* become numerous. *Pleurotomaria canadensis* is known to pass from the Potsdam into this Group.

4. The Quebec Group, which takes its name from the city of Quebec, in Canada, where it was first studied, and is subdivided into the Levis, Lauzon, and Sillery Groups. The Levis division, which takes its name from Point Levis in Canada, comprehends the Philipsburgh rocks which are 4,860 feet thick, in addition to 1,385 feet of the Orleans section, making the whole division 6,145 feet thick. The Lauzon division, which takes its name from Lauzon, in Canada, is about 4,000 feet in thickness. And the Sillery division, which takes its name from Sillery Cove in Canada, is 2,000 feet in thickness, making the maximum depth of the three divisions of this Group 12,145 feet. The Levis division is highly fossiliferous, while only a few fossils are known from other divisions. Some of the fossils of this Group are found both in the Chazy and Calciferous Groups, and the Canadian geologists for a time supposed it to be the equivalent, in some way or other, of these rocks; but later investigations have shown that it has a fauna of its own, and that it offers beds of passage from the Potsdam to the Trenton fauna, in addition to those of the Chazy and Calciferous.

5. The Chazy Group, which takes its name from Chazy, Clinton county, New York, and has an extensive geographical range over New York and Canada, is seldom found over 300 feet in thickness. The upper part of the 1st Magnesian limestone in Missouri may be the equivalent of this Group, or rather the dark bluish gray semi-crystalline limestones, interstratified with the grayish drab earthy magnesian varieties, destitute of chert, which crop out in some



places on top of the 1st Magnesian, and are usually classed with it. The Group has likewise been doubtfully identified in Wisconsin and other Northwestern localities.

6. The Birdseye Limestone, which is a well marked Group of rocks in New York. The rocks break with a conchoidal fracture, and the surface presents numerous crystalline spots due to calcspar in the tubes of *Tetradium fibratum*, which it contains in abundance, and from which the Group takes its name. It is not, however, so distinct in its fossil remains as to be characterized and determined elsewhere, and therefore some geologists treat the name as a synonym for the Black River Group.

7. The Black River Group (including the Birdseye limestone or its equivalent) which is found in New York, Pennsylvania, Canada and the Island of Anticosti, and is supposed to underlie Ohio, Indiana and Illinois, for it is again found cropping out under the Trenton Group in Missouri and other places west of the Mississippi. It has a very wide geographical range, and in Pennsylvania attains the important thickness of 5,500 feet.

The *Orthoceratites*, which commenced an existence in the Upper Potsdam, reach their greatest development in this Group of rocks. Some shells are found more than ten feet in length and exceeding a foot in diameter. Other Cephalopoda are found in abundance, and several new genera commence an existence.

The synonyms for the Black River Group in the early geological reports are *Mohawk limestone*, *Base of the Trenton limestone*, *Blue limestone*, *Black marble of Isle La Motte*, *Bald Mountain limestone*, *sparry limerocks*, *Transition chequered limestone*, *Seven foot Tier* and *Metalliferous limerock*.

8. The Trenton Group, which takes its name from Trenton, Oneida county, New York, is found almost everywhere on the Continent, where the Lower Silurian rocks are exposed. In New York, Pennsylvania, Kentucky, Illinois, Missouri and Canada, its greatest thickness does not exceed 1,000 feet; while on the Island of Anticosti it reaches 1,700, and in Tennessee 2,500 feet. The Galena limestone of Illinois and Wisconsin, and the Cape Girardeau limestone of Missouri, belong to it.

The limestones of this Group are literally a mass of fossils, and withal so well preserved, that several hundred species and many genera have been defined. No Group of palaeozoic strata has been studied with more interest, or has yielded more facts beneficial to science. It is a magnificent museum of well preserved shells, representing almost every character of the ancient population of the sea.

9. The Utica Slate Group, which takes its name from Utica, New York, and seems to be confined in its Geographical range to Pennsylvania, New York and Canada, and reaches its greatest thickness in Pennsylvania at 400 feet. Its synonyms are *Black slate*, *Pulaski shales*, *Frankfort slate* and *Lorraine shales*.

10. The Hudson River Group, which takes its name from the exposure on Hudson River, New York, has an extensive geographical range, and reaches its greatest thickness in Canada, at 2,000 feet. The fossils which characterize it are nearly the same as those which characterize the Trenton Group. The intervention of the Utica slate in New York and Canada furnishes the only excuse for separating the two groups. In the Western and Southern States, where the Utica slate is absent from the strata, the upper part of the Lower Silurian is

generally called the Cincinnati Group, though in Tennessee it is known as the Nashville Group, or more generally it is known as the Blue Limestone. The Cincinnati Group, as exposed in Ohio, Indiana and Kentucky, with which I am better acquainted than with any other Group of rocks, will receive more than a passing notice. The total thickness of the exposure will scarcely exceed 1,000 feet, the lower part of which is probably the equivalent of the upper part of the Trenton Group, and the remainder belongs to the Hudson River Group. The Cincinnati Group, therefore, is of value as a technical name only so far as it expresses the absence of the Utica slate, and points to the locality of its exposure.

Some fossils, as *Bellerophon bilobatus*, *Strophomena alternata*, *Zygospira modesta*, *Leptena sericea*, *Buthotrephis gracilis*, *Beyrichia chambersi*, *Calymene senaria*, *Isotelus gigas* and *Isotelus megistos* pass entirely through the Group. *Trinucleus concentricus*, *Triarthrus becki*, *Orthis multisecta*, *O. emacerata*, *Streptorhynchus hallia*, *Ambonychia bellistriata*, *Modiolopsis cincinnatiensis*, *Cycloconcha mediocardinalis*, *Lichenocrinus crateriformis* and *Chetetes* (?) *jamesi*, are confined to the lower half of the group. *Glyptocrinus decadactylus*, *G. dyeri*, *G. nealli*, *G. fornselli*, *Lichenocrinus tuberculatus*, *Streptorhynchus filitexta*, *S. subtenta*, *S. sulcata*, *S. sinuata*, *S. nutans*, *Orthis insculpta*, *O. subquadrata*, *Rhynchonella capax*, *R. dentata*, *Cypricardites haynesi*, *Anomalodonta gigantea*, *A. alata*, *Anodontopsis milleri*, *Favistella stellata*, *Tetradium fibratum* and *Streptelasma corniculum*, are found only in the upper part of the Group. Some fossils occupy only a few feet in vertical range, as *Orthis insculpta*, *Orthis retrorsa*, *O. emacerata*, *Glyptocrinus nealli* and *Streptorhynchus sulcata*. These facts teach us that during the deposition of the rocks, the fauna of the ocean was constantly changing. One form ceasing to exist at a given place at one time, and another at another time; a new species appearing at one period, and another at another period. Not, however, indicating either the extinction or creation of a new species, because though the *Orthis insculpta* has a vertical range of only about three feet, it is found in the Trenton Group, in New York, in much earlier strata; and substantially the same may be said of other forms.

The Group of rocks, throughout its entire thickness, is composed of alternate layers of blue marl and limestone, of varying thickness. In some places the marl is 6 or 8 feet thick, without a layer of stone. At other places, one layer of stone, 4, 6 or 8 inches in thickness, follows another, with intervening layers of marl, of much less thickness, for 40 or 50 feet. It is rare to find a layer of limestone more than a foot in thickness. All the layers are broken into small, irregular pieces, sufficiently large, however, for cellar and other light stone work for which they are used. When the blue marl is exposed for a few years to the action of the weather, it gradually loses its color, and finally presents a dull gray appearance. Where the marl in the bed, only a few feet from the surface, has been changed to the dull gray color, crystals of the sulphate of lime are found on the layers of stone and in the marl. The silicious matter prevails over the carbonate of lime in the layers of marl, while the carbonate of lime is much in excess of the silicious matter in the layers of stone, due in part, at least, to the fact that the stones are almost literally a mass of more or less comminuted shells, corals and crinoids. There is nothing, therefore, in the general character

and appearance of the stones and marl to indicate the changing character of the fossil contents, to which I shall now call more particular attention.

The *Zygospira modesta* is found throughout the group, varying in size from a small pin-head to a pea. The largest size has been called *Zygospira cincinnatiensis*. The smaller specimens differ in their proportional length and breadth and in the proportional elevation of the middle of the ventral valve, and corresponding depression of the mesial sinus of the dorsal valve. The larger specimens differ in the same respect; and as the number of plications is but little increased, they become larger and coarser. The same species from the Trenton Group, at Ottawa, Canada, is more elongated, and more finely plicated than the Cincinnati forms; while specimens from the Trenton Group of Southern Minnesota are scarcely distinguishable from Cincinnati specimens of medium size. This species passes through the Trenton, Utica and Hudson River Groups, and is found in the Clinton Group.

*Strophomena alternata* is found throughout the Group. Specimens secured within 200 feet of low water mark at Cincinnati, are large, thin, frail, and somewhat flat, but in their markings resemble the more profound specimens from the Trenton Group of New York and Ottawa, Canada. Many specimens found from 350 to 450 feet above low water mark are peculiarly thick, firm and heavy. From 450 feet above low water mark to the top of the Group the specimens are, generally, proportionately longer on the hinge line and more distinctly eared than they are below, and frequently much larger. One form of these long eared specimens has been called variety *loxorhytis*. The variety *nasuta* is most distinctly marked at an elevation from 400 to 450 feet above low water mark, where it is thicker and deeper than the same variety from the Trenton Group of New York and Canada. The variety *alternistriata* is most common in the middle and upper part of the Group. The variety *fracta* is found only in a vertical range of a few feet about the middle of the Group. This species is widely distributed and ranges from the Chazy to the Clinton Groups, passing through a great many forms, which, if constant or characteristic of particular geological horizons, would be regarded as good species.

*Leptena sericea* is found throughout the Group, changing at times in size, length of the hinge line and comparative thickness. It is a common form in the Trenton, Hudson River and Clinton Groups.

*Strophomena tenuistriata* is frail and rare in the lower part of the Group, but quite common and well preserved in the upper part. This, including its nearly related forms, under the names of *rhomboidalis* and *depressa*, is almost world wide in its distribution, and ranges from the Trenton Group to the Lower Carboniferous. One could not hesitate, however, in separating the Lower Silurian from the Upper Silurian forms, and these again from the Devonian and Lower Carboniferous forms, while remarking the somewhat general resemblance between them.

*Streptorhynchus hallia* is found in the lower 200 feet of the Group, and is not known to occur elsewhere. *S. planoconvexa* occupies only a few feet in vertical range about the middle of the Group. *S. nutans*, *S. planumbona*, *S. subtenta* and *S. flitexta* are confined in their range to the upper part of the Group; though *S. subtenta* is found in the Hudson River Group at English Head, Anticosti, and *S. flitexta* in the Trenton Group of New York.

*Streptorhynchus sinuata* has a vertical range of only a few feet below the middle of the Group, and *S. sulcata* has a vertical range of only a few feet near the upper part of the Group.

*Orthis bellula*, *O. plicatella*, *O. fissicosta*, *O. ella* and *Cythere cincinnatiensis* are confined within a vertical range of about 100 feet, near the middle of the Group. *O. plicatella*, *O. triplicatella*, *O. fissicosta* and *O. jamesi* vary much in size and proportional length and breadth and general appearance, and sometimes run so close together that it is only by close observation that the species are separated. *Orthis ella* varies so much in size and number of plications that it could be separated into three forms sufficiently distinct to have specific names, if the forms were found only in distinct Groups of rocks. But, probably, no shell indicates the unceasing change and development of animal life during the deposition of the Group as much as the *Orthis lynx*. It is found of all dimensions, from 1-16 of an inch to 2 inches in length, breadth and thickness. The mesial sinus is usually occupied with three plications, and the mesial fold with four; but sometimes the mesial sinus has only two plications, and sometimes it has four and even five, while the mesial fold always contains one more than the sinus, if the specimen is regularly developed. The more profound the sinus, the fewer plications in it. Some specimens are much longer than they are wide; others much wider than long. Some specimens, with hinge-line shorter than the width of the shell, become globose and nearly as round as an apple; others have the hinge-line prolonged to double the width of the shell, and have nearly the form of *Spirifera mucronata*. Small specimens of the globose form are marked with about sixteen plications, while the long-eared forms have as many as forty on each valve. Some specimens have thin shells; while others, no larger, have very thick ones. These extreme varieties do not occupy the same layers of rock, but different strata. Considerable variation exists, however, in specimens occupying the same layer; and so many intermediate forms are found in different layers, that the extremes in the Group are linked together.

The maximum thickness of the lower Silurian, as shown by the Groups mentioned, is 48,745 feet; and the fossiliferous part of the metamorphic rocks, 36,500 feet; making a total of 85,245 feet, or a little over sixteen miles from the top of the Hudson River Group to the base of the fossiliferous rocks. In other words, if all the Metamorphic and Lower Silurian Groups were fully represented, at their greatest thickness, on the Hudson River or at Cincinnati, we would expect to find fossils by digging or boring at these places for sixteen miles. The fact is probable, however, that part of the earth was dry land, while another part was covered with an ocean; and that the dry land was worn away by the action of rain, and other causes, while the ocean bed, gradually filled up, as the Atlantic fills to-day, by sedimentary deposition. There is no evidence of dry land, during all this period; but the negative evidence to the contrary, in the total absence of land plants and animals. Dry land may have existed, however, in the shape of barren rocks and disintegrated matter, for mechanical deposition; but if it did not exist, it is presumed that deposition took place more rapidly at the bed of the ocean at one place than at another, and that the ocean currents removed what had been deposited at one place, and carried it to another; so that, in either case, the maximum thickness of each Group is the measure of the lapse of time

that transpired during its deposition on the ocean-bed; and these, when placed together, in their order of deposition, constitute the true geological column.

The Upper Silurian rocks are subdivided in ascending order, as follows: 1. Oneida Conglomerate, which takes its name from Oneida county, New York. 2. Medina sandstone, which takes its name from Medina, New York. 3. Clinton Group, which takes its name from Clinton, New York. 4. Niagara Group, which takes its name from its development at the Falls of Niagara. 5. Onondaga Salt Group, which takes its name from Onondaga, New York, where the salt springs have been extensively wrought; and 6. Lower Helderberg Group, which takes its name from the Helderberg Mountains of New York.

The Oneida Conglomerate has been called the Shawangunk Grit, the Shawangunk Conglomerate and the Millstone Grit. The word Shawangunk, signifying, in the Indian language of the aborigines, White rock, has been regarded as quite appropriate, because it is expressive of the character of the rocks. The greatest thickness of this Group in New York and Pennsylvania is about 500 feet. The rocks are of such a character that they have not preserved the fossil remains with the exception of imperfect fucoidal impressions.

The Medina sandstone is usually of a red color, with the exception of a gray band near the top. Between the mouth of the Niagara river and Lewiston, it is 350 feet thick, though at Barton, Canada, it is 618 feet thick. Its dimensions in Pennsylvania are much increased. In the latter State it is subdivided into three Groups on lithological grounds; the lower, a compact greenish gray sandstone about 400 feet thick, the next a soft argillaceous red and brown sandstone and shale 700 feet thick, and the higher a white or light gray sandstone and shales, 450 thick; making a total thickness of 1,150 feet. Like other sandstones, it usually contains but few fossils, but in some localities it is highly fossiliferous, especially in the upper part.

The Clinton Group is only estimated, in Ohio and other Western localities, at 50 feet or less in thickness. In New York and Canada from 50 to 400 feet, and on the Island of Anticosti at 610 feet; but in Pennsylvania it reaches the great thickness of 1,620 feet. (Geo. of Penn., vol. i., p. 106.)

Prof. Hall says of this group: "In the Western portion of the State (N. Y.) the limit between the Medina sandstone and Clinton Group is well defined, and the materials very distinct; but, in the central part of the State, we find the same conditions which operated during the deposition of the Medina sandstone to have been continued into the Clinton Group. The latter commences by a shaly deposit, which is soon succeeded by alternations of sandstone, in character precisely like the Medina sandstone. The general character of the marine vegetation of the two periods is similar; and a peculiar type of plants commences its existence in the Medina sandstone, and terminates in the Clinton Group. When we examine the Clinton Group in the central part of the State, its analogies are chiefly with the Medina sandstone; and it is there a powerful and important formation, presenting, however, great variation in its successive beds and characters, in every respect truly protean. In its Western extension, the Clinton Group assimilates in character to the Niagara Group, and in the Western district has nearly lost the character which it presents in Oneida county. At the same time that the Group assumes a more calcareous character in its Western extension, it

loses the fossils which were typical of it, and becomes charged with fossils peculiar to calcareous strata. Thus, while we find its lower beds, from Wayne county Westward to the Niagara river, characterized by peculiar fossils, we find the upper beds containing many species which pass upward into the Niagara Group. Indeed, there is no line which can be designated between these two Groups, which shall mark the limits of the organic products. It is true, nevertheless, that by far the greater part of the fossils of the two Groups are distinct; and the small number in the lower Group, of those which we regard as proper to the Niagara Group, are for the most part inconspicuous, and not so well developed as they are in the Niagara." Again, he says:

"In tracing the Clinton Group Westerly, we find its affinities more with the rocks below, or that the material and fossils recognized on the one side as the Clinton formation are not strongly separated from the upper beds of the Hudson River Group; and studied in these localities alone, they might be regarded as constituting part of the same. On the other hand, the Niagara becomes defined as a calcareous Group, and the line between it and the strata below is strongly drawn. The base of this limestone would everywhere be recognized as the base of the Upper Silurian Rocks, while the strata below are marked by fossils which belong to the Lower Silurian fauna."

The Niagara Group consists of shales and limestones, and may, for the purposes of this introduction, include the lenticular mass of dolomitic limestones found in Canada, and bearing the name Guelph Group. The Guelph Group takes its name from the town of Guelph in Canada, where it is about 160 feet in thickness. At Lockport and at Niagara Falls, the Niagara Group consists of about 80 feet of shales, and 164 feet of limestones. The Group is found exposed in Ohio, Indiana, Illinois and other Western States, rarely exceeding 400 feet in thickness; but in Tennessee it reaches 1,700 feet, and is subdivided as follows: 1st, Clinch Mountain sandstone, consisting of shales and sandstones, 700 feet; 2d, White Oak Mountain sandstone, 500 feet; 3d, Dyestone Group of shales and sandstones, which takes its name from an iron ore, which is sometimes used as a dyestone, 300 feet; and 4th, Meniscus Limestone, which takes its name from a lens or a meniscus-shaped fossil sponge, named by Roemer, *Astræospongia meniscus*, 200 feet.

Prof. Hall says: "The rocks of this Group, where best developed in Western New York, consist of a mass of shale, succeeded by one of limestone, the passage from the former to the latter taking place by the gradual increase of calcareous matter. The upper or terminating limestone of the Clinton Group is succeeded by a soft argillo-calcareous shale, which maintains its character unchanged for a thickness of 80 to 100 feet. Throughout the greater part of this it abounds in fossils, nearly all of which are distinct from those in the beds of the Clinton Group. In the Western part of New York, the lithological characters of the Clinton and Niagara Groups are so similar, that they could well be united. The fossils also of the two Groups, though generally distinct, are nevertheless generically similar, and several species pass from the lower to the higher Group. Still farther West, the assimilation becomes more perfect, and there appears to be no line of separation between the two Groups. At the same time the fossils appear to be commingled."

The Onondaga Salt Group is sometimes called the Onondaga limestone or Gypsiferous series. Its outcrop in New York is traced, says Prof. Hall, from Montgomery county, where the formation is represented by a thin band, Westward into Wayne county, where it attains a thickness of 1,000 feet, and thinning out towards Canada, it crosses the Niagara river, at 300 feet in thickness, whence it is traced Northwestwardly to Lake Huron, and thence to Mackinac. It is also exposed in Pennsylvania, where it was called the Surgent red marl, and in Western and Southern localities. In its lower part, it is made up chiefly of marls and thin shaly limestones, which include the gypsum and salt. Its upper portion consists of magnesian limestones, often yielding hydraulic or water lime, and is hence sometimes distinguished as the Water Lime Group, where it really forms part of the Onondaga Group.

The Lower Helderberg Group has a wide geographical range, but is not susceptible of subdivision into many Groups, at any great distance from the Helderberg Mountains, where Vanuxem separated it into ; 1st, Water Lime Group or Tentaculite limestone ; 2d, Pentamerus limestone ; 3d, Delthyris shaly limestone ; 4th, Encrinal limestone ; and 5th, Upper Pentamerus limestone. The Water Lime Group was so called from its yielding hydraulic cement, and is about 200 feet thick in New York, and thins out in Canada in a Northwesterly direction. Pentamerus limestone took its name from the *Pentamerus galeatus* found in it, in Cherry Valley, New York, where it is about 30 feet thick. The Delthyris shaly limestone was so named from the abundance of *Spirifera macropleura*, and *S. pachoptera*, formerly called *Delthyris*, found in it. It is about 70 feet thick. The Encrinal limestone is about 25 feet thick, and was so named from the quantity of broken encrinites it contains. It has also been called the *Scutella* limestone, from a shield-like pelvis of a crinoid found in it. The Upper Pentamerus limestone is about 75 feet thick, and was so named from the abundance of *Pentamerus pseudogaleatus* with which it is characterized.

The Lower Helderberg attains the greatest thickness of 2,000 feet, at Gaspe, Canada. It is 1,720 feet in Pennsylvania, 400 to 500 in New York, and from 100 to 200 feet thick in the Western States.

The fossils of this Group are quite similar to those of the Niagara, and mark a very gradual development from the former to the latter. The Water Lime Group is especially characterized by large crustaceans of the genera *Eurypterus* and *Pterygotus*, the highest forms of organized life, which, so far as we know, had, up to this period, appeared upon the earth.

The rocks of the Upper Silurian formation, as shown by the preceding estimates, are about 8,000 feet in thickness. They contain the fossil remains of no vertebrate animal so far as yet known. They show the uninterrupted course of oceanic life from one Group of rocks to the next, and the gradual appearance of higher organisms, and yet they are without land plants, save perhaps a species of *Psilophyton*, and vertebrate animals, even of the lowest oceanic types. The student of biology and the laws of evolution may pause here and reflect upon the fact, that from the geological horizon of the *Eozoon canadense*, we have passed upwards through nearly eighteen miles in thickness of oceanic deposits, which represent many millions of years as we understand the laws of deposition, and while the changes in the forms of life have been numerous and wonderful, and



the development into higher forms constant throughout the whole period, yet that life had found its most complete development in a lowly organized articulate animal—the awkwardly constructed, loosely thrown together—flimsy *Eurypterus*.

The Devonian formation was so named by Murchison from Devonshire, England. It is subdivided in ascending order into: 1st, Oriskany Sandstone; 2d, Upper Helderberg Group; 3d, Hamilton Group; 4th, Portage Group; 5th, Chemung Group; and 6th, the Catskill Group.

The Oriskany Sandstone takes its name from Oriskany, in Oneida county, New York. It has a wide geographical range, being found in Canada, New York, Pennsylvania, Maryland, Illinois, and other States. Its maximum thickness is placed at 300 feet.

Prof. Hall says: "The line of demarkation between subordinate Groups, and the line of separation between systems, are equally strong, and that the whole series may be regarded as a succession of minor Groups; that the strong lines of division are almost always due to the absence of some formation, which if present, would show a gradation to the next; and these subdivisions into systems have been made dependent on the imperfection rather than the perfection of the sequence. Thus the strong line of demarkation between the Silurian and Devonian which exists where the lower Helderberg Group is absent, is softened to a gentle gradation through the intervention of these strata and the Oriskany sandstone. Where these are present in all their members, the line of separation becomes less sharply defined, and we have some evidence that there may exist other intermediate members, or a more full development of those now known between the two formations." (Pal. of N. Y., vol. iii., p. 35.)

In Southern Illinois, the Oriskany sandstone of the Devonian system is underlaid by a Group of silicious limestones, that in their upper beds contain well marked Devonian fossils, and below those that seem to be characteristic, Upper Silurian forms; thus forming beds of passage from the Upper Silurian to the Devonian systems. This Group seems to hold about the same relation to these two systems that the Anticosti Group of Canada holds between the Upper and Lower Silurian of that country. This Group is called the "Clear creek limestone," and is limited in its outcrop to the counties of Jackson, Union, and Alexander, first making its appearance in the bluffs of Mississippi, at the lower end of the ridge known as the "Devil's backbone," in Jackson county, and continuing along the river bluffs to Clear creek, in Union county, where they are fully developed, and where they probably attain their maximum thickness of from 250 to 350 feet. (Geo. of Ill., vol. i., p. 125.) Subsequent investigations, and a more complete collection of the fossils which belonged to the upper and lower divisions of the mass, led to the conclusion that the upper division represented, at least in part, the Oriskany period, and the lower, the Delthyris shaly beds of the Lower Helderberg series. And in accordance with this view, without any well marked line of separation on lithological grounds, but supported by an examination of the same beds in Perry county, Missouri, the upper 200 feet, at the maximum thickness, is placed in the lower division of the Oriskany period, and the lower 200 feet, at the maximum thickness, is placed in the Lower Helderberg period. (Geo. of Ill., vol. ii., p. 8; vol. iii., p. 24.)



The Upper Helderberg Group, in its fullest development, consists of four members, the Caudagalli grit, the Schoharie grit, the Onondaga and Corniferous limestones. The first, when characteristic, is a dark, gritty slate, which has a cleavage vertical to the line of deposition, and is generally destitute of fossils; but with surfaces, covered with curved, fucoid-like markings, which have given it its name. This rock constitutes beds of passage from the Oriskany sandstone, and graduates above into the Schoharie grit, which is an arenaceous limestone, weathering to a brownish color, and succeeded by the gray, subcrystalline, coral-line formation, which is known in New York as the Onondaga limestone, while the Corniferous limestone consists of the higher dark-colored chert beds of the Group. (Hall's Pal., vol. iii., p. 43.)

The Caudagalli grit was named from a fucoid having some resemblance in form to the tail of a chicken cock. It has a small geographical range, and its maximum thickness in New York is placed at 70 feet.

The Schoharie grit, named from Schoharie, New York, has a small geographical range and no considerable thickness. In Pennsylvania and New Jersey, where the Caudagalli and Schoharie grits have been called the Post Meridian grits, they have a thickness of 300 feet. This Group in New York consists of a fine grained calcareous sandstone, somewhat resembling the Oriskany, but bearing quite different fossils.

No vertebrate animal has yet made its appearance.

The Onondaga limestone is only from 20 to 50 feet thick in New York, and, though traced over a great extent of country, rarely exceeds that thickness. In Missouri it is said to vary from 10 inches to 75 feet in thickness, but there are few if any Western localities where this Group can be separated from the Corniferous.

The Corniferous limestone was named from the chert found in it, which breaks with a conchoidal fracture. It varies from 100 to 200 feet in thickness, in Ohio, Indiana, Illinois, Pennsylvania and New York. It is from 300 to 400 feet thick in Michigan, and reaches its maximum of 850 feet at Tilsonbury, Canada. At Louisville, Kentucky, this Group consists of a mass of fossil corals, in a bed of hard limestone. It has the appearance of having been a coral reef, and has been so designated, but the limestone is so firm that perfect specimens of the corals are not easily procured.

This is the Group of rocks in which the first remains of vertebrate animals are found. These remains consist generally of the teeth of fish, but other hard parts are also found. Some strata are known which are literally a mass of fish teeth cemented together in a compact limestone. Land plants become more common in this Group.

The maximum of these subdivisions of the Upper Helderberg Group is therefore 1,225 feet. Each subdivision in New York is characterized by distinct fossils, but in Canada several of the most characteristic species of the Oriskany sandstone ascend through each of the overlying Groups into the Corniferous.

From this time forward, the five sub-kingdoms in animal life are represented in every Group of rocks capable of their preservation, viz. : *Protista*, *Radiates*, *Mollusks*, *Articulates*, and *Vertebrates*. They all continue to change and develop, but the great field of evolution is well nigh surrendered to the *Vertebrates*,

which have commenced an existence in the lowest forms of marine fish, soon to appear in higher states of perfection, and to be followed by a number of Batrachian or Reptilian forms before the close of palæozoic time.

The Hamilton Group was named by Vanuxem, from Hamilton, Madison county, New York. In its fullest development, it consists of the Marcellus shale, Ludlowville shale, Enderinal limestone, Moscow shale, Tully limestone, and Genessee slate. It is about 1,200 feet thick in Eastern New York, and 1,150 feet in Eastern Pennsylvania. It thins out Westerly and Southerly, but maintains a thickness of from 300 to 600 feet in Canada.

Prof. Hall says: "The Hamilton Group consists, in Eastern New York, at base of the black Marcellus shale, including some bands of Goniatic limestone. Next succeeds a hard, compact, calcareo-arenaceous shale, which, under atmospheric influences, crumbles into angular fragments. This is followed by more arenaceous bands, and by bands of soft slaty shale, with arenaceous shale or argillaceous sandstone, and with some thin bands of limestone, which are almost entirely composed of organic remains. Toward the Western part of New York the coarser materials gradually diminish, and we find an increasing proportion of soft shales, with a more general diffusion of the calcareous matter, and the mass is terminated by a limestone. Finally, from the Genessee river to the Western limits of the State, the entire Group, above the Marcellus shale, which is persistent, consists of dark, soft shales and bands of limestone. Thus the lithological characters are at the East, an olive shale and sandstone; at the West, a grayish-blue, calcareous shale, with bands of limestone. (Pal., vol. iii., p. 46.)

The Portage Group was named from Portage, New York. It is 1,400 feet thick in the Eastern part of the State, and 1,150 feet thick in Eastern Pennsylvania. It thins out Westerly and Northerly. The Black Slate or Huron Shale of Michigan and Ohio belongs to this Group, and is from 300 to 400 feet thick. It is from 100 to 200 feet thick at Louisville, Kentucky, and New Albany, Indiana, and 50 feet thick in Missouri. The Group ought not to be called the Huron Shale either in Ohio or elsewhere, because that name was appropriated by the early Canadian geologists, and applied to a Group of Metamorphic rocks. If one were to speak of the slate in the Huronian Group, it would be called the Huron Slate, and so would shale if found there, be properly designated as Huron Shale. The words Huron and Huronian have the same signification, and are too near alike to be used to designate widely separated Groups of rocks. The "Huron Shale" is a synonym for the "Portage Group," with nothing to commend its use, because it has neither geographical nor local significance.

The Chemung Group was named from Chemung, New York, and is about 2,000 feet thick in the Eastern part of that State, but at Huntington, Pennsylvania, it is 3,200 feet in thickness. It thins out to the West, and is estimated at only 400 feet in Ohio, where it is called the Erie Shale, and 200 feet in Missouri. While the Hamilton, Portage and Chemung Groups in New York are, combined, only about 4,000 feet thick, and in Pennsylvania do not much exceed 6,000, at Gaspe, Canada, they are 7,036 feet, though this estimate may include the Catskill Group.

The passage from the Silurian formation to the Devonian at Gaspe, Canada, where the rocks are exposed 9,000 feet in thickness, is not evidenced by any

change in lithological character, and is hardly determinable from an examination of the fossils. The lower 2,000 feet is classed with the Helderberg Group in the Silurian, but it may include the Oriskany sandstone of the Devonian series. The upper 7,036 feet are supposed to represent all the other Groups in the Devonian formation of New York, but the divisions are not clearly defined as in New York, nor readily separable from an examination of either the fossils or the rocks. (Geo. of Canada, 1863, p. 396; do. 1866, p. 260; Hall's Pal., vol. iii., p. 45.)

A very interesting Group of rocks, because of the highly fossiliferous character and abundance of *Goniatites*, is exposed at Rockford, near Seymour, Indiana, which probably represents part of the Chemung Group; though Prof. Meek and the Illinois geologists have regarded it as the representative of the Kinderhook Group.

The shales and sandstones of the Catskill Group form in their greatest expansion at the Catskill Mountains, from which the Group takes its name, a mass of at least 3,000 feet in thickness. The Group is composed of red and greenish or olive shales and shaly sandstones, with some gray and mottled sandstones and conglomerates.

In Pennsylvania this Group is divided into: 1st, Ponent Red Sandstone, which is 5,000 feet thick in its Southeastern outcrops; 2d, Vespertine, Conglomerate and sandstone, 2,660 feet in thickness, near the Susquehanna, making a total thickness of 7,660 feet.

The rocks of the Devonian age are therefore 15,235 feet, or nearly three miles in thickness, and are connected together by their interlocking fossil contents, and united with those of Silurian age, precisely as the Lower Silurian Groups are related to each other.

The Devonian rocks are followed by the Carboniferous, which are divided into: 1st, Lower Carboniferous; 2d, Carboniferous Conglomerate; 3d, Coal Measures; and 4th, Permian.

The Lower Carboniferous Group, in Nova Scotia, consists of reddish and gray sandstones and shales, conglomerates and thick beds of limestone, with marine shells and gypsum, and is 7,636 feet in thickness. On the island of Bonaventure, it is about 2,000 feet in thickness, or with the Carboniferous conglomerate 2,766, and contains the *Eatonia peculiaris*, which is found in the Oriskany sandstone of New York. In Illinois, the Lower Carboniferous is subdivided into Groups in ascending order as follows: 1st, Kinderhook Group, from 100 to 150 feet; 2d, Burlington Group, from 25 to 200 feet; 3d, Keokuk Group, from 100 to 150 feet; 4th, St. Louis Group, from 50 to 200 feet; and 5th, Chester Group, from 500 to 800 feet. In Missouri, it is subdivided in ascending order, into: 1st, Encrinital limestone; 2d, Archimedes limestone; 3d, St. Louis limestone; and 4th, Ferruginous sandstone; the maximum thickness of which is only about 1,200 feet. The Burlington Group has been called the Encrinital limestone, and in Missouri it is 500 feet thick. The Keokuk limestone is the Archimedes limestone of Owen. The Warsaw limestone is sometimes called the second Archimedes limestone. The St. Louis limestone was called the Concretionary limestone by Owen. The Chester Group has been called Kaskaskia limestone, Upper Archimedes limestone, and Pentremital limestone. In Tennessee, the Lower Carboniferous is subdivided into the Mountain limestone and Siliceous Group.

The total thickness is about 1,200 feet. In Ohio the Group is subdivided into the Cleveland Shale, Bedford Shale, Berea Grit and Cuyahoga Shale, these together constitute what is also known as the Waverly Group, named from the quarries at Waverly, Ohio. In Michigan, Prof. Winchell subdivided the Group into the Marshall Group, Napoleon Group, Michigan Salt Group, and Carboniferous limestone, the total thickness of which is 550 feet. In the *Anthracite Coal* region of Pennsylvania this Group has a maximum thickness of 3,000 feet, and consists mainly of red shale; it thins out rapidly towards the Northwest, but maintains a great thickness Southwardly through Virginia and into Alabama, gradually changing its character, however, to a calcareous limestone.

The Lower Carboniferous rocks present us with a greater number of species of Crinoids, and these in greater profusion than all the other subdivisions of the Palæozoic rocks. A single locality at Burlington, Iowa, in the Burlington Group, has furnished about 350 species. Another locality at Crawfordsville, Indiana, has almost a world-wide reputation for the great beauty, perfection and abundance of its crinoids. It is in the Keokuk Group.

The genus *Nautilus* among the Cephalopoda is clearly recognized and is quite abundant, while the genus *Orthoceras*, whose perfection represented an organization akin to the embryonic form of the *Nautilus* has become correspondingly rare.

The Carboniferous conglomerate is 1,400 feet in thickness in Pennsylvania, and entirely thins out before reaching the Mississippi river. It is only from 100 to 200 feet thick in Ohio.

Prof. Hall says: "It was evidently formed from the fragments of older formations, drifted, water-worn, rounded and deposited with the larger pieces at the base, and the whole cemented together with smaller pebbles and sand. The depth of the formation in Pennsylvania, and its thinning out to the North and West, shows the current to have been from Southeast to Northwest, and probably indicates the close proximity of the source in a Southeasterly direction. In Michigan the thinning out is toward the South, or in a contrary direction. In Illinois the formation thins out from the West toward the East. The character of this formation, its manner of deposition, the currents which must have existed to distribute it, all indicate that this continent was an archipelago at the era of the Carboniferous conglomerate."

In some places the conglomerate is a quartzose grit used for millstones, and it is hence called the Millstone grit.

The Coal Measures are 14,570 feet thick in Nova Scotia, 8,000 feet in Pennsylvania, 2,500 feet in Tennessee, 2,000 feet in Ohio, 1,200 feet in Illinois, 640 feet in Missouri, 2,000 feet in Kansas, and a greater thickness in Nebraska.

This Group is sometimes divided into Upper and Lower Coal Measures, a separation that seems to be founded upon the fossil contents in many places.

Land Plants, which began their existence in the Devonian era, if we except *Psilophyton princeps*, became abundant in the Coal Measures. They are distributed through the rocks, the shales, and the coal. Marine Vegetation, the growth of the Marsh, and the Flora of dry land, existed in immense quantities, and was widely distributed, but the higher orders of plants and forest trees were yet unknown on the face of the earth.

Among the Cephalopoda, numerous genera and species had disappeared. The *Nautilus* the highest form then developed, was common, and furnishes us with several subgeneric types, thus manifesting its prosperity, and pointing to its continuance in succeeding strata; while the *Orthoceras* had become rare and diminutive, preparatory to interring the last of the family in this Group of rocks.

Among the Gasteropoda there was a decided advancement from the marine forms, to the land snails of the genus *Pupa*.

Among the *Articulatæ* the progress in animal life was still more clearly manifested, not only in the appearance of the marine forms of the genera *Euproops*, *Acanthotelson*, and *Anthrapalæmon*, but in the appearance of terrestrial insects of the family *Neuropteridæ*; *Myriapods* of the genera *Eoscorpius*, *Mazonia* and *Architarbus*; while the *Trilobites* that swarmed in frail hulks in earlier days gradually became extinct.

The wheel of evolution rolled yet more rapidly among the Vertebrata. The fish became more diversified and more highly organized. Amphibian animals made their appearance in several families, some of them were protected by scales, others were not; some had long vertebral columns, others had short ones; some had limbs well developed, and in form were lizard-like, while others were destitute of limbs or possessed them weak and half developed.

The Permian Group was so named by Murchison from Perm, a government in Russia. This Group is known only in the country West of the Mississippi, and is so intimately connected with the Coal Measures as to be hardly separable. Its maximum thickness does not exceed 500 feet. The maximum thickness, therefore, of the Carboniferous Groups may be placed at 24,100 feet.

The Carboniferous rocks, as found in the Uinta Mountain Region, have been subdivided by Powell and others, into four Groups, viz.: Lodore Group, Red Wall Group, Lower Aubrey Group and Upper Aubrey Group.

The maximum thickness of the Groups forming the Palæozoic rocks of North America, as here shown, is as follows:

Laurentian.....	32,750 feet.
Huronian.....	20,000 "
Lower Silurian.....	48,745 "
Upper Silurian.....	8,000 "
Devonian.....	15,235 "
Carboniferous.....	24,100 "
Total.....	148,830 feet.

This is a little over 28 miles, all of which is known to be fossiliferous, except the three miles at the base. It may be, that the thickness of some of the Groups is overestimated, and it may be, that two Groups, which are estimated, were deposited at the same time, and that only one of them should be counted; but on the other hand, it may be, that some Groups are entirely omitted, and that others have not been measured at the place of their greatest thickness. The probability is, therefore, that the maximum thickness of the Groups, when more certainly ascertained, as it will be by future explorations and measurements, will not fall much, if at all, below the present estimate.

The limestones of the Palæozoic rocks were formed in clear ocean waters, from the remains of calcareous shells. Their formation must have been ex-

tremely slow, so slow, that a foot may represent a thousand years, or even more. The shales, clays and marls may have been deposited with greater rapidity; but when we consider, that the change from one kind of rock-forming material to another indicates a break in the continuity of time, and that great lapse of time was necessary for the growth of the marine and land vegetation, which formed the coal found between beds of clay and shale, we are led to the conclusion, that the time which elapsed between two separate beds of clay and shale, or marl, added to the time necessary for the deposition of their materials, will, on the whole, make their formation as slow as that of the limestones. The sandstones and conglomerates, particularly those of the Coal Measures, seem to have been made up of transported materials, and were therefore deposited much faster than the limestones, though but few of them appear to have been made with any rapidity. The evenness of the strata, over a great extent of country, indicates slowness in transportation and deposit. The fact, that the materials must have been taken from pre-existing rocks, by the water, before transportation, tends again to convince us of the slowness of their formation. From these considerations, it would not be extravagant to say, that palæozoic time represents more than one hundred millions of years, and we would close our eyes against the testimony of the rocks, were we to conclude that palæozoic time could be estimated by years less than many millions.

The vegetable kingdom began with the lowest of its kind, the algæ or sea weeds, and with the lowest forms of these. The development was as gradual as the deposition of the strata. It was not until the Devonian age, that land plants appeared of sufficient firmness for preservation, if we except Dawson's *Psilophyton*, which probably grew in a marsh. These were of the lowest classes. They became more diffuse and diversified with the lapse of time; but the palæozoic era closed without the appearance of any of the higher orders or classes.

The animal kingdom likewise began with the lowest of its kind, the *Eozoon canadense*. The learned Dr. Haeckel has established the fifth sub-kingdom in animal life to include forms below the *Radiata*, and therefore very nearly related to inorganic matter. This sub-kingdom he has called *Protista*. The *Eozoon canadense*, under this classification, belongs to the order *Polythalamia*, sub-class *Radiolaria*, class *Rhizopoda*, sub-kingdom *Protista*. Ages passed, about which we know very little, before the period of the St. John's Group, which ushered in the lower Silurian. At this time we find the lowest forms of the Radiates, Mollusks and Articulates. The Articulates are represented by the lowest forms of the Trilobites, which, in their perfect state, represented the embryonic condition of the existing *Limulus*. Millions of years pass by again, before the appearance of Gasteropoda, and Cephalopoda, in the Upper Potsdam Group; meantime the system of life, which commenced with the lowest forms, as if by spontaneous generation, by evolution, increases species and genera and reaches a higher and still higher grade of development. Later still, in the Calciferous Group, the *Lamellibranchiata* commenced its existence; a class that has fought its way through all succeeding time, and is even now in the height of its prosperity and advancement. All classes of life, which existed in the ocean, up to the first appearance of the *Lamellibranchiata*, continued to live, develop, increase their species and genera, and improve, through millions of years, before the Vertebrates first made their ap-

pearance in the Devonian seas. During all this time, the earth was barren and lifeless. Mighty changes had taken place, mud had been deposited on the bed of the ocean many miles in thickness, and life had grown from its mineral origin in the ocean, until it had nearly the strength to maintain itself on land; but all this had been accomplished as silently as the earth moves in her orbit. The same gradual development continued throughout each sub-kingdom to the close of the Carboniferous period. The evolution in animal forms was as slow as time, and quite as monotonous, except in the constant progress to a higher and more complicated existence. The Coal Measures furnish us with fish-like remains, having the limbs of a frog or the breathing capacity of a tailed batrachian. Several genera have been made from the fossil remains of this period, which bridge the chasm, from the Ganoid fish to the batrachian and the lacertian. The highest Palæozoic type of animal life, yet known, Prof. Dawson has called *Hylonomus lyelli*. The distinguished principal of McGill-College says, that it presents characters partly allying it to the newts and other batrachians and partly to the true lizards. The structure of the skull and vertebræ resembling a batrachian, and the well developed ribs, broad pelvis, and cutaneous covering assimilating it to the true lizards.

The following inferences are therefore to be drawn from the testimony afforded by the Palæozoic rocks:

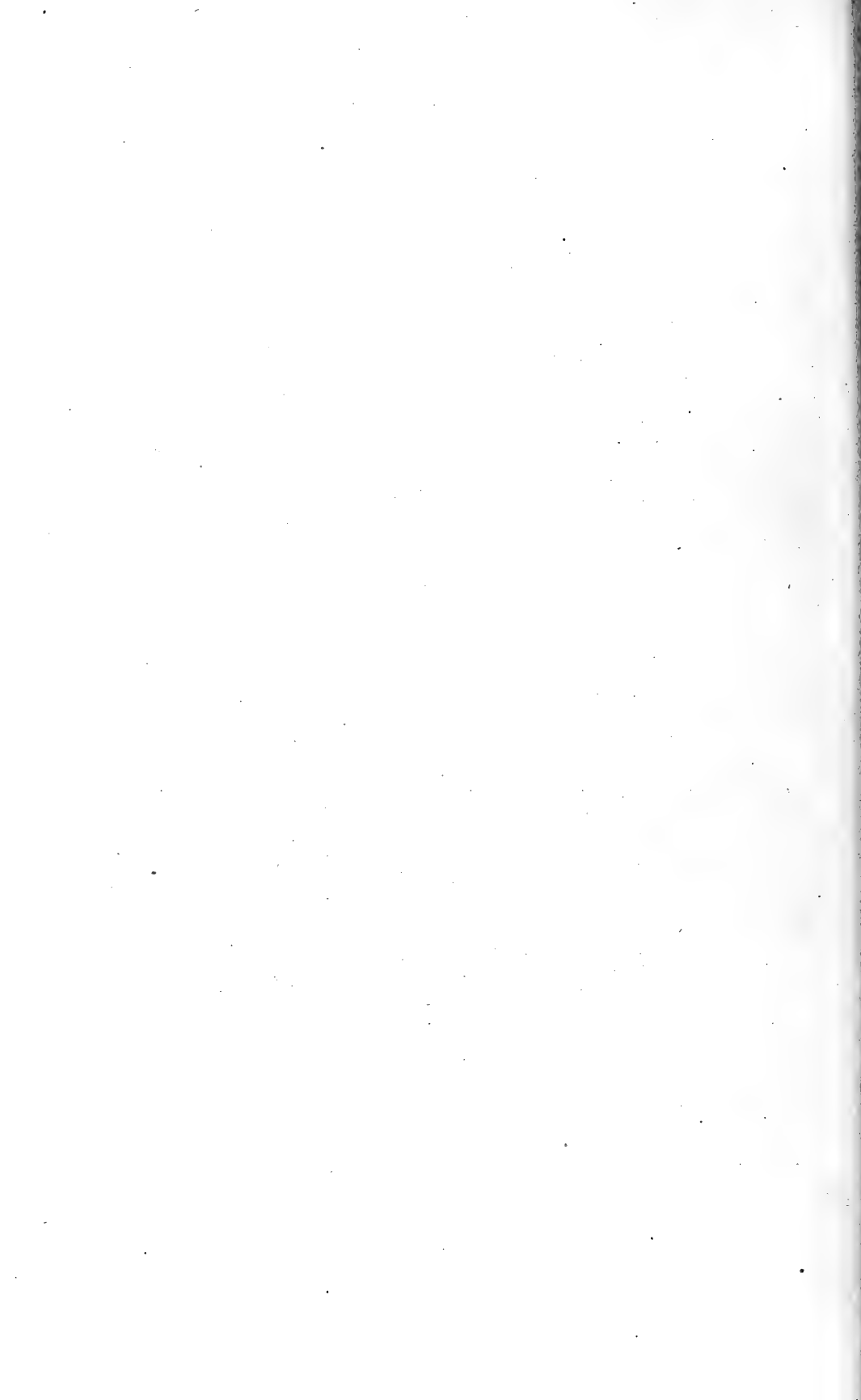
First. That the maximum thickness of the Groups of strata is from twenty-five to thirty miles.

Second. That it required many millions of years for the formation of these Groups.

Third. That both vegetable and animal life commenced an existence, in the lowest forms, such as might have been produced by a concentration of chemical forces, or, by what has been called spontaneous generation.

Fourth. That, by processes of evolution, vegetable life developed from marine forms to land plants.

Fifth. That animal life began in the sub-kingdom Protista; from this sub-kingdom, by processes of evolution and the survival of the fittest, there arose Radiates, Mollusks, Articulates and Vertebrates. Each of these sub-kingdoms is now in the highest state of its development, though many families and some orders in each sub-kingdom have had their day and become extinct, or have been on the decline for untold ages.





# VEGETABLE KINGDOM.

## PLANTÆ.

The genus *Prototaxites* was founded by Dawson upon fossil wood, supposed to resemble the genus *Taxites*. The same author founded the genus *Nematoxylon*, upon what he supposed to be nearly related fossil wood. Mr. Carruthers examined the same specimens and pronounced them both Algæ, and founded the new genus *Nematophycus*. Seeds, stems, roots and other organs of uncertain affinity, have received generic and specific names. Some fossils are classed by some authors with the Algæ, as *Cruziana*, *Scolithus*, etc., while others regard them as tracks of marine animals. Authors are not in accord, even on the arrangement of the fronds and branches of ferns into families. For these reasons, I have not undertaken to arrange the fossils of the vegetable kingdom, represented in the palæozoic rocks, into families.

ACANTHOPHYTON, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18. [Ety. *akantha*, a thorn; *phyton*, a plant.]

spinosum, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Chemung Gr. [Sig. thorny.]

ALETHOPTERIS, Sternberg, 1825, Vers. Darst. Flora der Vorwelt. [Ety. *alethos*, true; *ptēris*, a fern.]

acuta, Brongniart, 1828, (Pecopteris acuta) Prodrôme d'un Histoire des Vegetaux Fossiles, Coal Meas. [Sig. acute.]

aquilina, Brongniart, 1828, (Pecopteris aquilina) Prodr. Hist. Veg. Foss., Coal Meas. [Ety. *aquilinus*, like an eagle; from *Pteris aquilina*, the eagle brake.]

bunburyi, Andrews, 1875, Ohio Pal., vol. 2, Coal Meas. [Ety. proper name.]

coxana, Lesquereux, 1861, Geo. Sur. Ky., vol. 4, Coal Meas. [Ety. proper name.]

crenulata, Brongniart, 1828, (Pecopteris crenulata) Prodr. Hist. Veg. Foss., Coal Meas. [Sig. slightly crenulated or zigzagged.]

cristata, Gutbier, 1843, (Pecopteris cristata) in Gæa von Sachsen, Coal Meas. [Sig. crested.]

discrepans, Dawson, 1868, Acad. Geol., Devonian. [Sig. different.]

distanis, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. from the distant pinnules.]

emarginata, Goëppert, 1836, (Pecopteris emarginata) Syst. Filic. Foss., Coal Meas. [Sig. without a border.]

erosa, Gutbier, 1843, (Pecopteris erosa) in Gæa von Sachsen, Coal Meas. [Sig. eroded.]

falcata, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. sickle-shaped.]

grandifolia, Newberry, 1873, Ohio Pal., vol. 1, Coal Meas. [Sig. large-leaved.]

grandis, Dawson, 1863, Can. Nat. & Geol., vol. 8, Coal Meas. [Sig. grand, large.]

halli, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. proper name.]

heterophylla, Lindley & Hutton, 1833, (Pecopteris heterophylla) Foss. Flora, Coal Meas. [Sig. irregularly-leaved.]

holdeni, Andrews, 1875, Ohio Pal., vol. 2, Coal Meas. [Ety. proper name.]

hymenophylloides, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. from resemblance to *Hymenophyllites*.]

inflata, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. inflated.]

ingens, Dawson, 1868, Acad. Geol., Devonian. [Sig. huge.]

levis, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. smooth.]

lanceolata, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. lance-shaped.]

lonchitidis, Sternberg, 1824, (Filicites lonchiticus) Vers. Darst. Flora der Vorwelt, Coal Meas. [Ety. from *Lonchitis*; the fern, "adder's tongue."]

longifolia, Presl, 1838, (Pecopteris longifolia) in Sternb. Flora der Vorwelt, Coal Meas. [Sig. long-leaved.]

macrophylla, Newberry, 1873, Ohio Pal., vol. 1, Coal Meas. [Sig. long-leaved.]

marginata, Brongniart, 1828, (Neuropteris marginata) Hist. Veg. Foss., Coal Meas. [Sig. bordered.]

massillonis, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Ety. proper name.]

maxima, Andrews, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. the largest.]

- mazonana, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. proper name.]
- muricata, Brongniart, 1828, (Pecopteris muricata) Hist. Veg. Foss., Coal Meas. [Sig. armed with thorns.]
- nervosa, Brongniart, 1828, (Pecopteris nervosa) Hist. Veg. Foss., Coal Meas. [Sig. full of nerves.]
- obscura, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. from the obscure nerves.]
- oweni, Lesquereux, 1860, Geo. Rep. Ark., vol. 2, Coal Meas. [Ety. proper name.]
- pectinata, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. sloping two ways, like a comb.]
- pennsylvanica, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. proper name.]
- perleyi, Hart, 1868, Acad. Geol., Devonian. [Ety. proper name.]
- pluckeneti, Schlotheim, 1820, (Filicites pluckeneti) Petref., Coal Meas. [Ety. proper name.]
- preciosa, see Pecopteris preciosa.
- pteroides, Brongniart, 1828, (Pecopteris pteroides) Hist. Veg. Foss., Coal Meas. [Sig. wing-formed.]
- rugosa, Lesquereux, 1858, Catal. Pottsville Foss., Coal Meas. [Sig. wrinkled.]
- serlii, Brongniart, 1828, (Pecopteris serlii) Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- serrula, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. diminutive of *serra*, a saw.]
- serrulata, see Pecopteris serrulata.
- solida, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. solid.]
- spinulosa, Lesquereux, 1870, Geo. Sur. Ill., vol. 4. [Sig. full of little spines.]
- stellata, Lesquereux, 1866, Geo. Sur. Ill., vol. 2. [Sig. starred.]
- taeniopteroides, Bunbury, 1847, Quar. Jour. Geo. Soc., vol. 3, Coal Meas. [Sig. like *Taeniopteris*.]
- urophylla, Brongniart, 1828, (Pecopteris urophylla) Hist. Veg. Foss., Coal Meas. [Sig. sharp-leaved.]
- ANARTHROCANA, Gœppert, 1845, in Tchih. Voy. [Ety. *an*, without; *arthros*, joint; *canna*, a plant.]
- perryana, Dawson, 1863, Quar. Jour. Geo. Soc., vol. 19, Devonian. [Ety. proper name.]
- ANEIMITES, Dawson, 1861, Quar. Jour. Geol. Soc., vol. 17—A subgenus of *Cyclopteris*. *acadica*, see *Cyclopteris acadica*.
- ANNULARIA, Sternberg, 1822, Vers. Darst. Flora der Vorwelt. [Ety. *annulus*, a ring.] Wood, in 1860, proposed the name *Trochophyllum* instead of *Annularia*, because the latter was preoccupied as a generic name in the sub-kingdom Mollusca.
- acuminata, Dawson, 1861, Can. Nat., vol. 6, Devonian. [Sig. sharp-pointed.]
- calamitoidea, Schimper, 1869, Pal. Veget., Coal Meas. [Sig. like a *Calamite*.]
- dawsoni, Schimper, 1869, Palæontologie Vegetale, Devonian. [Ety. proper name.] Proposed for *Asterophyllites latifolius*, of Dawson, because that name was preoccupied.
- equisetiformis, Lindley & Hutton, 1835, Foss. Flora, vol. 2, Coal Meas. [Ety. from the resemblance to *Equisetum*.]
- fertilis, Sternb., 1824, Vers. Darst. Flora der Vorwelt, Coal Meas. [Sig. fertile.]
- inflata, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. inflated.]
- laxa, Dawson, 1871, Foss. Plants Canada, Devonian. [Sig. loose, open.]
- longifolia, Brongniart, 1828, Prodrome Hist. Veg. Foss., Coal Meas. [Ety. *longus*, long; *folium*, a leaf.]
- minuta, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. minute.]
- sphenophylloides, Zenker, 1833, (Galium sphenophylloides) in Leonh. v. Bronn's Jahrb., Coal Meas. [Ety. *sphen*, a wedge; *phylon*, a leaf; *eidos*, form.]
- ANTHOLITES, Brongniart, 1822, Mem. du Mus. d'Hist. Nat., vol. 8. [Ety. *anthos*, flower; *lithos*, stone.]
- devonicus, Dawson, 1868, Acad. Geol., Devonian. [Ety. proper name.]
- floridus, Dawson, 1871, Foss. Plants Can., Devonian. [Sig. full of flowers.]
- priscus, Newberry, 1854, Ann. of Sci., vol. 2, Coal Meas. [Sig. ancient.]
- pygmeus, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. dwarfish.]
- rhabdocarpus, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Ety. *rhabdos*, a rod; *karpus*, fruit.]
- squamosus, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. scaly.]
- spinosus, Dawson, 1868, Acad. Geol., Coal Meas. [Sig. full of spines.]
- ARAUCARITES, Presl, 1838, in Sternberg, Vers. Darst. Flora der Vorwelt. [Ety. *arau-carites*, from *Araucaria*, a genus of large trees growing in the Southern hemisphere, especially in Australia.]
- gracilis, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. slender.]
- ARCHÆOPTERIS, Dawson, 1863, Can. Nat., vol. 8. [Ety. *archaios*, ancient; *pterus*, fern.]
- acadica, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Ety. proper name.]
- harti, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Ety. proper name.]
- obtusa, Lesquereux, 1858, (Nœggerathia obtusa) Geo. Sur. Penn., vol. 2, Devonian. [Sig. obtuse.]
- stricta, Andrews, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. pressed together.]
- ARTHRARIA, Billings, 1874, Pal. Foss., vol. 2. [Ety. *arthron*, a joint.]
- antiquata, Billings, 1874, Pal. Foss., vol. 2, Potsdam Gr. [Sig. ancient.]
- biclavata, S. A. Miller, 1875, Cin. Quar. Jour. Sci., vol. 2, Cin'ti Gr. [Sig. double-clubbed.]

- ARTHROPHYCUS**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *arthron*, a joint; *phykos*, a sea plant.]  
*harlani*, Conrad, 1838, (Fucoides *harlani*) Ann. Rep. N. Y., Medina sandstone. [Ety. proper name.]
- ARTHROSTIGMA**, Dawson, 1871, Foss. Plants Canada. [Ety. *arthron*, a joint; *stigma*, a dot or puncture.]  
*gracile*, Dawson, 1871, Foss. Plants Can., Devonian. [Sig. slender.]
- ARTISIA**, Sternberg, 1825, Vers. Darst. Flora der Vorwelt. [Ety. proper name.]  
*transversa*, Steinhaur, 1818, (Phytolithus *transversus*) Trans. Am. Phil. Assoc., Coal Meas. [Sig. transverse.]
- ASPLENITES**, Göppert, 1836, Systema Filicum Fossilium. [Ety. *Asplenium*, a genus of ferns.]  
*ruber*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. *ruber*, red.]
- ASTEROCARPUS**, Göppert, 1836, Syst. Fil. Foss. [Ety. *aster*, a star; *karpos*, fruit.]  
*grandis*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. great.]  
*sternbergi*, Göppert, 1836, Syst. Filic. Foss., Coal Meas. [Ety. proper name.]
- ASTEROPHYCUS**, Lesquereux, 1876, 7th Ann. Rep. Geol. Sur. Ind. [Ety. *aster*, a star; *phykos*, a sea weed.]  
*coxi*, Lesquereux, 1876, 7th Ann. Rep. Geol. Sur. Ind., Low. Carb. & Coal Meas. [Ety. proper name.]
- ASTEROPHYLLITES**, Brongniart, 1828, Prodr. Hist. Veg. Foss. [Ety. *aster*, a star; *phyllon*, a leaf.]  
*acicularis*, Dawson, 1862, Quar. Jour. Geol. Soc., vol. 18, Devonian. [Sig. full of small pins.]  
*apertus*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. from opening between leaves and stem.]  
*brardi*, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]  
*crassicaulis*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. *crassus*, thick; *caulis*, a stem.]  
*curta*, see Bechera *curta*.  
*equisetiformis*, Schlotheim, 1824, in Vers. Darst. Flora der Vorwelt, Coal Meas. [Ety. like unto *Equisetum*.]  
*erectifolius*, Andrews, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. leaves erect.]  
*foliosus*, Lindley & Hutton, 1833, Foss. Flora, Coal Meas. [Sig. full of leaves.]  
*gracilis*, Lesquereux, 1860, Geo. Sur. Ark., vol. 2, Coal Meas. [Sig. slender.]  
*grandis*, Lindley & Hutton, 1833, Foss. Flora, Coal Meas. [Sig. great.]  
*lanceolatus*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. from the lanceolate point of the leaf.]  
*latifolius*, Dawson, 1862, Quar. Jour. Geol. Soc., vol. 18, see *Annularia dawsoni*.  
*laxus*, Dawson, 1868, Acad. Geol., Devonian. [Sig. loose.]  
*lentus*, Dawson, 1871, Foss. Plants Can., Devonian. [Sig. pliant, tough.]
- longifolius*, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. long-leaved.]  
*minutus*, Andrews, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. small.]  
*ovalis*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. from the oval nuts.]  
*parvulus*, Dawson, 1862, Quar. Jour. Geol. Soc., vol. 18, Devonian. [Sig. small.]  
*rigidus*, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. rigid.]  
*scutigerus*, Dawson, 1862, Quar. Jour. Geol. Soc., vol. 18, Devonian. [Sig. shield-bearing.]  
*sublævis*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. nearly smooth.]  
*trinervis*, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. three-veined.]  
*tuberculatus*, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. covered with tubercles.]
- BECHERA**, Sternberg, 1824, Vers. Darst. Flora der Vorwelt. [Ety. proper name.]  
 Bechera would be better orthography.  
*curta*, Dawson, 1868, Acad. Geol., Coal Meas. [Sig. short.]  
*grandis*, Bunbury, 1847, Quar. Jour. Geol. Soc., vol. 3, Coal Meas. [Sig. great.]  
*tenuis*, Bunbury, 1846, Am. Jour. Sci., 2d series, vol. 2, Coal Meas. [Sig. thin, slender.]
- BEINERTIA**, Göppert, 1836, Syst. Filic. Foss. [Ety. proper name.]  
*göpperti*, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Ety. proper name.]
- BRACHYPHYLLUM**, Brongniart, 1828, Prodr. Hist. Veg. Foss. [Ety. *brachys*, short; *phyllon*, a leaf.]  
*obtusum*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. obtuse.]
- BUTHOTREPHIS**, Hall, 1847, Pal. N. Y., vol. 1, [Sig. growing in the depths of the sea.]  
*antiquata*, Hall, 1847, Pal. N. Y., vol. 1, Calcif. Gr. [Sig. ancient.]  
 (?) *cæspitosa*, Hall, 1850, 3rd Reg. Rep., Trenton Gr. [Sig. turf-like.]  
*flexuosa*, Emmons, 1844, (Fucoides *flexuosa*) Tac. Syst., Hud. Riv. Gr. [Sig. crooked.]  
*gracilis*, Hall, 1847, Pal. N. Y., vol. 1, Trenton to Clinton Gr. [Sig. slender.]  
*gracilis var. crassa*, Hall, 1847, Pal. N. Y., vol. 2, Clinton Gr. [Ety. *crassus*, thick.]  
*gracilis var. intermedia*, Hall, 1852, Pal. N. Y., vol. 2, Trenton to Clinton Gr. [Ety. intermediate in size between the *gracilis* and *crassa*.]  
*impudica*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. shameless, immodest.]  
*lesquereuxi*, Grote & Pitt, 1876, Buff. Soc. Nat. Hist., Water Lime Gr. [Ety. proper name.]  
*palmata*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. palmate, having lobes like the fingers of the hand.]

- ramosa, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. branching.]  
 ramulosa, S. A. Miller, 1874, Cin. Quar. Jour. Sci., Cin'ti Gr. [Sig. full of little branches.]  
 subnodosa, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. somewhat nodose.]  
 succulens, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Ety. *succulens*, sappy, from the succulent stems.]  
**CALAMITES**, Guettard, 1751, Mem. Ac. Sci. Paris, [Ety. *calamus*, a reed.]  
 approximatus, Schlotheim, 1820, Petrefactenkunde, Coal Meas. [Ety. from the closeness of the joints.]  
 arenaceus, Jager, 1827, Pflanzen-Versteinerungen, Coal Meas. [Sig. sandy.]  
 bistriatus, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. double-striated.] This name was preoccupied by Sternberg.  
 cannaformis, Schlotheim, 1820, Petrefactenkunde, Coal Meas. [Sig. like the plant, *canna*.]  
 cisti, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. proper name.]  
 cruciatus, Sternberg, 1824, Vers. Darst. Flora der Vorwelt, Coal Meas. [Sig. cross-shaped.]  
 decoratus, Steinhaur, 1818, (Phytolithus decoratus) Trans. Am. Phil. Assoc., Coal Meas. [Sig. ornamented.]  
 disjunctus, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. separated into joints.]  
 dubius, Artis, 1838, Antedil. Phytology, Coal Meas. [Sig. doubtful.]  
 gigas, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. large.]  
 gracilis, Lesquereux, 1861, Geo. Sur. Ky., vol. 4, Coal Meas. [Sig. slender.]  
 inornatus, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Devonian. [Sig. unadorned.]  
 nodosus, Schlotheim, 1820, Petrefactenkunde, Coal Meas. [Sig. knotty, knobbed.]  
 nova-scoticus, Dawson, 1863, Can. Nat. & Geol., vol. 8, Coal Meas. [Ety. proper name.]  
 pachyderma, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. thick-barked.]  
 ramosus, Artis, 1838, Antedil. Phytology, Coal Meas. [Sig. branching.]  
 suckovi, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. proper name.]  
 sulcatus, Martin, 1809, (Phytolithus sulcatus) Petrif. Derb., Coal Meas. [Sig. furrowed.]  
 transitionis, Dawson, 1861, Can. Nat. & Geol., Devonian. [Sig. going across, passage.] This name was preoccupied by Göppert in 1834.  
 undulatus, Sternberg, 1824, Vers. Darst. Flora der Vorelt, Coal Meas. [Sig. wavy.]  
 veltzi, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. proper name.]  
**CALAMODENDRON**, Binney, 1868, Observ. on the Struct. of Foss. Plants, etc. [Ety. *calamus*, a reed; *dendron*, a tree.]  
 antiquum, Dawson, 1871, Foss. Plants Canada, Devonian. [Sig. ancient.]  
 obscurum, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. obscure, hidden.]  
 tenuistriatum, Dawson, 1871, Foss. Plants Canada, Devonian. [Sig. fine-lined.]  
**CALAMOCCLUS**, Schimper, 1869, Palæontologie Vegetale. Proposed to include *Asterophyllites equisetiformis*, *A. foliosus*, *A. longifolius*, *A. rigidus* & *Bechera grandis*.  
**CALLIPTERIS**, Brongniart, 1828, Tabl. des Veg. Foss. (Ety. *kallos*, beautiful; *ptēris*, a fern.)  
 sullivanti, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. proper name.]  
**CARDIOCARPON**, Brongniart, 1828, Prodr. Hist. Veg. Foss. [Ety. *kardia*, a heart; *karpos*, fruit.]  
 affine, Lesquereux, 1860, Geo. of Ark., Coal Meas. [Sig. near to.]  
 annulatum, Newberry, 1853, Ann. of Sci., vol. 1, Coal Meas. [Sig. ringed.]  
 baileyi, Dawson, 1868, Acad. Geol., Devonian, Coal Meas. [Ety. proper name.]  
 bicuspidatum, Sternberg, 1820, (Carpolithes bicuspidatus) Flora der Vorwelt, Coal Meas. [Sig. double-pointed.]  
 bisectum, Dawson, 1863, Can. Nat. & Geol., vol. 8, Coal Meas. [Sig. divided.]  
 cornutum, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Devonian. [Sig. horned.]  
 crampi, Hartt, 1868, Acad. Geol., Devonian. [Ety. proper name.]  
 elongatum, Newberry, 1853, Ann. of Sci., vol. 1, Coal Meas. [Sig. lengthened.]  
 fluitans, Dawson, 1863, Can. Nat. & Geol., vol. 8, Coal Meas. [Sig. floating.]  
 ingens, Lesquereux, 1860, Geo. of Ark., Coal Meas. [Sig. huge, large.]  
 latum, Newberry, 1853, Ann. of Sci., vol. 1, Coal Meas. [Sig. broad.]  
 marginatum, Artis, 1838, Antedil. Phytol., Coal Meas. [Sig. margined.]  
 minus, Newberry, 1853, Ann. of Sci., vol. 1, Coal Meas. [Sig. less.]  
 newberryi, Andrews, 1875, Ohio Pal., vol. 2, Coal Meas. [Ety. proper name.]  
 obliquum, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Devonian. [Sig. oblique.]  
 orbiculare, Newberry, 1853, Ann. of Sci., vol. 1, Coal Meas. [Sig. orbicular.]  
 ovale, Dawson, 1871, Foss. Plants Can., Devonian. [Sig. egg-shaped.]  
 plicatum, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. plaited.]  
 punctatum, Göppert, 1836, Syst. Filic. Foss., Coal Meas. [Sig. punctate.]  
 retusum, Sternberg, 1820, (Carpolithes retusum) Flora der Vorwelt, Coal Meas. [Sig. blunt.]  
 samareforme, Newberry, 1853, Ann. Sci., vol. 1, Coal Meas. [Sig. like elm seed.]  
 tenellum, Dawson, 1873, Rep. Foss. Plants, Low. Carb. [Sig. delicate.]

- trevortoni, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. proper name.]
- CARPOLITHES, Schlotheim, 1820, Petrefactenkunde. [Ety. *karpos*, fruit; *lithos*, stone.]
- bicuspidatus*, see *Cardiocarpon bicuspidatum*.
- bifidus, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. bifid, cloven.]
- bullatus, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. studded with knobs.]
- cistula, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. a little chest or coffer.]
- clavatus*, see *Rhabdocarpon clavatus*.
- compactus, Dawson, 1871, Foss. Plants Canada, Devonian. [Sig. compact.]
- corticatus, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. having thick bark.]
- disjunctus, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. separated.]
- fasciculatus, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. a small bundle.]
- fragarioides, Newberry, 1873, Ohio Pal., vol. 1, Coal Meas. [Sig. resembling a strawberry.]
- jacksonensis, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Ety. proper name.]
- limatus, Dawson, 1863, Quar. Jour. Geo. Soc., vol. 19, Devonian. [Sig. elegant.]
- multistriatus, Presl, 1833, in Sternberg Flora der Vorwelt, Coal Meas. [Sig. many-lined.]
- persicaria, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. *Persicaria*, an existing genus of plants.]
- platimarginatus, Lesquereux, 1860, Geo. Sur. Ark., Coal Meas. [Sig. flat-margined.]
- retusus*, see *Cardiocarpon retusum*.
- siliqua, Dawson, 1863, Quar. Jour. Geo. Soc., vol. 19, Devonian. [Sig. a pod.]
- spicatus, Dawson, 1863, Quar. Jour. Geo. Soc., vol. 19, Devonian. [Sig. spiked.]
- trilocularis*, see *Trigonocarpon trilobulare*.
- umbonatus, Sternberg, 1820, Vers. Darst. Flora der Vorwelt, Coal Meas. [Sig. having a shield.]
- vesicularis, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. bladder-like.]
- CAULERPITES, Sternb, 1833, Vers. Darst. Flora der Vorwelt. [Ety. *kaulos*, stem; *ergo*, to creep.]
- marginatus, Lesquereux, 1866, Am. Phil. Soc., vol. 13, Coal Meas. [Sig. bordered.]
- CAULOPTERIS, Lindley & Hutton, 1833, Foss. Flora. [Ety. *kaulos*, stem; *pterus*, fern.]
- acanthophora, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. thorn-bearing.]
- antiqua, Newberry, 1871, Quar. Jour. Geo. Soc., vol. 27, Devonian. [Sig. ancient.]
- cisti, Brongniart, 1828, (Sigillaria cisti) Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- gigantea, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. large.]
- insignis, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. remarkable.]
- intermedia, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. intermediate between *Sigillaria macrodiscus* and *Caulopteris cisti*.]
- lockwoodi, Dawson, 1871, Quar. Jour. Geo. Soc., vol. 27, Devonian. [Ety. proper name.]
- obtecta, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. covered.]
- peregrina, Newberry, 1871, Quar. Jour. Geo. Soc., vol. 27, Devonian. [Sig. foreign, strange.]
- punctata, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. dotted.] The name was preoccupied by Geopert in 1836.
- wortheni, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Ety. proper name.]
- CHONDRITES, Sternberg, 1833, Vers. Darst. Flora der Vorwelt. [Ety. from its resemblance to *Chondrus crispus*, or Irish moss.]
- antiquus, Brongniart, 1828, (*Fucoides antiquus*) Hist. Veg. Foss., Devonian. [Sig. ancient.]
- colletti, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. proper name.]
- targioni, Brongniart, 1828, (*Fucoides targioni*) Coal Meas. [Ety. proper name.]
- CONOSTICHUS, Lesquereux, 1876, 7th Ann. Rep. Geo. Sur. Ind. [Ety. *konos*, a cone; *stichos*, a row.]
- ornatus, Lesquereux, 1876, 7th Ann. Rep. Geo. Sur. Ind., Coal Meas. [Sig. adorned.]
- CORDAITES, Unger, 1850, Gen. et. sp., p. 277. [Ety. proper name.]
- angustifolius, Dawson, 1861, Can. Nat., vol. 6, Ham. Gr. [Sig. narrow-leaved.]
- angustifolius, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. The name was preoccupied.
- borassifolius, Sternberg, 1820, (Flabellaria borassifolia) Vers. Darst. Flora der Vorwelt, Coal Meas. [Ety. leaved like *Borassus*.]
- flexuosus, Dawson, 1863, Quar. Jour. Geo. Soc., vol. 19, Devonian. [Sig. winding, full of turns.]
- robbi, Dawson, 1861, Can. Nat., vol. 6, Ham. Gr. [Ety. proper name.]
- simplex, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. simple.]
- CREMATOPTERIS, Schimper, 1865, Monograph, Foss. Plants. [Sig. hanging-fern.]
- pennsylvanica, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. proper name.]

- CRUZIANA, D'Orbigny, 1842, Geo. du Voy. Amer. [Ety. proper name.]
- linnarrsoni, White, 1874, Rep. Invert. Foss., Potsdam Gr. [Ety. proper name.]
- rustica, White, 1874, Rep. Invert. Foss., Potsdam Gr. [Sig. plain, simple.]
- similis, Billings, 1874, Pal. Foss., vol. 2, Potsdam Gr. [Sig. like in aspect.]
- CYCLOPTERIS, Brongniart, 1828, Prodr. Hist. Veg. Foss. [Ety. *kuklos*, a circle; *ptēris*, a fern.]
- acadica, Dawson, 1861, Quar. Jour. Geo. Soc., vol. 17, Coal Meas. [Ety. proper name.]
- alleghaniensis, Meek, 1876, Desc. Foss. Plants Va., Ponent or Vespertine Gr., near base of Low. Carb. [Ety. proper name.]
- antiqua, Dawson, 1863, Can. Nat. & Geo., vol. 8, Coal Meas. [Sig. ancient.]
- browni, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Devonian. [Ety. proper name.]
- bockschi, Göppert, 1836, (Adiantites bohschii) Syst. Filic. Foss. See Nœggerathia bockschi.
- crispa, Germ. & Kaulf, 1831, (Filicites crispa) Nova. Acta. Acad., vol. 15, Coal Meas. [Sig. wavy.]
- elegans, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. elegant.]
- fimbriata, see Neuropteris fimbriata.
- flabellata, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. like a fan.]
- germari, Gutbier, 1835, Verst. Zwick. Schwarzk., Coal Meas. [Ety. proper name.]
- hallana, Göppert, 1836, Syst. Filic. Foss., Chemung Gr. [Ety. proper name.]
- hispida, Dawson, 1863, Can. Nat. & Geol., vol. 8, Coal Meas. [Sig. rough, hairy.]
- hirsuta, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. hairy.]
- incerta, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Ham. Gr. [Sig. uncertain.]
- jacksoni, Dawson, 1861, Can. Nat., vol. 6, Catskill Gr. [Ety. proper name.]
- laciniata, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. fringed.]
- lescuriana, Meek, 1876, Desc. Foss. Plants Va., Ponent or Vespertine Gr., near base of Low. Carb. [Ety. proper name.]
- oblata, Lindley & Hutton, 1837, Foss. Flora, vol. 3, Coal Meas. [Sig. oblate.]
- obliqua, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. oblique.]
- obtusa, Lesquereux, 1858, (Nœggerathia obtusa) Geo. Sur. Penn., vol. 2, Devonian. See Archæopteris obtusa.
- orbicularis, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. orbicular.]
- rogersi, Dawson, 1863, Quar. Jour. Geol. Soc., vol. 19, Devonian. [Ety. proper name.]
- trichomanoides, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. *Trichomanes*, the maiden-hair fern; *eidos*, form.]
- undans, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. waved.]
- valida, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Devonian. [Sig. sound, strong.]
- varia, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Devonian. [Sig. changing.]
- virginiana, Meek, 1876, Desc. Foss. Plants Va., Ponent or Vespertine Gr., near base of Low. Carb. [Ety. proper name.]
- wilsoni, Wood, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Ety. proper name.]
- CYCLOSTIGMA, Houghton, 1860, Ann. & Mag. Nat. Hist., 3d series, vol. 5. [Ety. *kuklos*, a circle; *stigma*, a dot or puncture.]
- densifolium, Dawson, 1871, Foss. Plants Can., Devonian. [Sig. dense-leaved.]
- DADOXYLON, Endlicher, 1840, Syn. Con. [Sig. pine or torch-wood.]
- acadianum, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Ety. proper name.]
- annulatum, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. annulated.]
- antiquum, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. ancient.]
- halli, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Ham. Gr. [Ety. proper name.]
- materialium, Dawson, 1863, Can. Nat., vol. 8, Up. Coal Meas. [Sig. belonging to wood.]
- newberryi, Dawson, 1871, Foss. Plants Can., Devonian. [Ety. proper name.]
- ouangondianum, Dawson, 1861, Can. Nat., vol. 6, Devonian. [Ety. proper name.]
- DANÆITES, Göppert, 1836, Syst. Filic. Foss. [Ety. proper name.]
- asplenioides var. major, Bunbury, 1846, Quar. Jour. Geol. Soc., vol. 2, Coal Meas. [Sig. large.]
- Dictyolites*, see Dictyophyton.
- becki, see Dictyophyton becki.
- DICTYOPHYTON, Hall, 1863, 16th Reg. Rep. [Ety. *dictyon*, a net; *phyton*, a plant.]
- annulatum, Hall, 1863, 16th Reg. Rep., Chemung Gr. [Sig. ringed.]
- becki, Conradi, 1837, (Lithodictyon becki) Ann. Rep. N. Y., Medina sandstone. [Ety. proper name.]
- conradi, Hall, 1863, 16th Reg. Rep., Chemung Gr. [Ety. proper name.]
- fenestratum, Hall, 1863, 16th Reg. Rep., Chemung Gr. [Sig. reticulated.]
- flitextile, Hall, 1863, 16th Reg. Rep., Chemung Gr. [Sig. woven like threads.]
- newberryi, Hall, 1863, 16th Reg. Rep., Portage Gr. [Ety. proper name.]
- nodosum, Hall, 1863, 16th Reg. Rep., Chemung Gr. [Sig. knotted.]
- redfieldi, Hall, 1863, 16th Reg. Rep., Portage Gr. [Ety. proper name.]
- rude, Hall, 1863, 16th Reg. Rep., Chemung Gr. [Sig. rude.]
- tuberosum, Conrad, 1842, (*Hydnoceras tuberosum*) Jour. Acad. Nat. Sci. Phil., vol. 8, Chemung Gr. [Sig. composed of tuber-like parts.]
- DICTYOPTERIS, Gutbier, 1835, Verst. Zwick. Schwarzk. [Ety. *dictyon*, a net; *ptēris*, a fern.]

- neuropteroidea, Gutbier, 1852, Verst. Stein Sachs., Coal Meas. [Sig. like *Neuropteris*.]
- obliqua, Bunbury, 1847, Quar. Jour. Geo. Soc., vol. 3, Coal Meas. [Sig. oblique.]
- rubella, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. somewhat red.]
- DIDYMOPHYLLUM, Göppert, 1841, Gatt. der Foss. Pflanzen. [Ety. *didymos*, double; *phyllon*, a leaf.]
- reniforme, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Ham. Gr. [Sig. kidney-shaped.] [nata.]
- Diplazites emarginatus* see *Pecopteris emarginata*
- DIPLOSTEGIUM, Corda, 1845, Beiträge zur Flora der Vorwelt. [Ety. *diplos*, double; *stega*, a covering.]
- brownianum, Corda, 1845, Beiträge zur Flora der Vorwelt, Coal Meas. [Ety. proper name.]
- retusum, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. turned back.]
- truncatum, Lesquereux, 1860, Geo. Sur. Ark., vol. 2, Coal Meas. [Sig. truncated, cut off.]
- EOPHYTON, Torell. [Ety. *eos*, dawn; *phyton*, a plant.]
- jukesii, Billings, 1874, Pal. Foss., vol. 2, Potsdam Gr. [Ety. proper name.]
- linnæanum (?) Torell, Potsdam Gr. [Ety. proper name.]
- explanatum, Dawson, 1870, Can. Nat. & Geol., Low. Arenig rocks. [Sig. spread out.]
- EQUISETITES, Sternberg, 1833, Vers. Darst. Flora der Vorwelt. [Ety. *Equus*, a horse; *seta*, a hair or bristle; in allusion to the resemblance to a horse-tail.]
- columnaris, Brongniart, 1828, (Equisetum columnaris) Hist. Veg. Foss., Coal Meas. [Sig. columnar.]
- curtus, Dawson, 1863, Syn. Carb. Flora in Can. Nat., vol. 8, Coal Meas. [Sig. short.]
- occidentalis, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. western.]
- stellifolius, Harlan, 1835, (Equisetum stellifolium) Trans. Geo. Soc. Penn., Coal Meas. [Ety. *stella*, a star, and *folium*, a leaf; in allusion to the whorled leaves.]
- Equisetum*, see *Equisetites*.
- columnare*, see *Equisetites columnaris*.
- stellifolium*, see *Equisetites stellifolius*.
- EREMOPTERIS, Schimper, 1869, Traité de Palæontologie Végétale. [Ety. *eremos*, solitary; *ptêris*, a fern.]
- artemisiæfolia, Sternberg, 1824, (Sphenopteris artemisiæfolia) Vers. Darst. Flora der Vorwelt, Coal Meas. [Sig. leaved like the plant *Artemisia*.]
- marginata, Andrews, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. bordered.]
- Filicites crispa*, see *Cyclopteris crispa*.
- louchiticus*, see *Alethopteris louchitidis*.
- pennæformis*, see *Pecopteris pennæformis*.
- pluckeneti*, see *Alethopteris pluckeneti*.
- Flabellaria borassifolia*, see *Cordaia borassifolia*.
- FUCOIDES, Brongniart, 1822, in Mémoires de la Soc. d'Hist. Nat. de Paris. [Ety. *fucus*, sea weed; *eidōs*, form.]
- alleganensis*, Harlan, 1830, Jour. Acad. Nat. Sci., vol. 6, Carb. See *Harlania halli*.
- auriformis*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Medina and Clinton Gr. Prof. Hall says, in 1852, that this can scarcely be referred to the organic remains.
- bilobata*, see *Rusophycus bilobatus*.
- brongniarti*, see *Harlania halli*.
- cauda-galli*, see *Spirophyton cauda-galli*.
- demissus*, Conrad, 1838, probably *Phytopsis tubulosa*.
- dentatus*, M. Brongniart, see *Diplograptus pristiniiformis*.
- flexuosa*, see *Buthotrephes flexuosa*.
- gracilis*, see *Buthotrephes gracilis*.
- graphica*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Portage Gr. [Sig. written.]
- harlani*, see *Arthropycus harlani*.
- heterophyllum*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Medina and Clinton Gr. Not likely the remains of an organic substance.
- retort*, Vanuxem, 1843, Geo. Rep. 3rd Dist. N. Y., Portage Gr. [Sig. a retort.]
- rigidus*, syn. for *Buthotrephes flexuosa*.
- secalinus*, see *Graptolithus* and *Diplograptus secalinus*.
- serra*, Brongniart, see *Graptolithus bryonoides*.
- simplex*, Emmons, see *Graptolithus* and *Diplograptus secalinus*.
- velum*, see *Spirophyton velum*.
- verticalis*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Portage Gr. [Sig. vertical.]
- Galium sphenophylloides*, see *Annularia sphenophylloides*.
- Gordia marina*, Hall, 1847, Pal. N. Y., vol. 1. Not the remains of any organic form; it is described as a track, see *Helminthoidichnites*.
- HALONIA, Lindley & Hutton, 1835, Foss., Flora. [Ety. from its close affinity with *Halonina*.]
- pulchella, Lesquereux, 1860, Geo. Sur. Ark., vol. 2, Coal Meas. [Sig. beautiful.]
- tuberculata, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. tuberculated.]
- HARLANIA, Göppert, 1852, Foss. Flora des Ueberg. [Ety. proper name.] Syn. for *Arthropycus*.
- halli, Göppert, 1852, Foss. Flora des Ueberg. (Fucoides alleganiensis, F. brongniarti, and F. harlani) Medina Gr. to Low. Carb. [Ety. proper name.] Syn. for *Arthropycus harlani*.
- HIPPODOPHYCUS, Hall, 1872, 24th Reg. Rep. [Ety. *hippodos*, horse-foot; *phukos*, a sea plant.]
- cowlesi, Hall, 1872, 24th Reg. Rep., Chemung Gr. [Ety. proper name.]
- HYMENOPHYLLITES, Göppert, 1836, Syst. Filic. Foss. [Ety. *hymen*, a membrane; *phyllon*, a leaf.]



- adnascens, Lindley & Hutton, 1835, Foss. Flora, vol. 2, Coal Meas. [Sig. growing upon.]
- alatus, Brongniart, 1828, Hist. Veg. Foss. (*Sphenopteris alata*) Coal Meas. [Sig. winged.]
- affinis, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. near to.]
- arborescens, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. branching like a tree.]
- ballantini, Andrews, 1875, Ohio Pal., vol. 2, Coal Meas. [Ety. proper name.]
- capillaris, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. *capillus*, hair.]
- clarki, Lesquereux, 1866, Geo. Sur., Ill., vol. 2, Coal Meas. [Ety. proper name.]
- curtilobus, Dawson, 1862, Quar. Jour. Geol. Soc., vol. 18, Devonian. [Sig. short-lobed.]
- delicatulus, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. delicate.]
- fimbriatus, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. fringed.]
- flexicaulis, Lesquereux, 1860, Geo. Sur. Ark., vol. 2, Coal Meas. [Sig. flexible.]
- furcata, Brongniart, 1828, (*Sphenopteris furcata*) Hist. Veg. Foss., Coal Meas. [Sig. forked.]
- gersdorfi, Göppert, 1836, Syst. Filic. Foss. Devonian. [Ety. proper name.]
- gigantea, see *Hymenophyllites lactuca*.
- gutbieranus, Unger, 1850, Gen. et. sp., Coal Meas. [Ety. proper name.]
- hildrethi, Lesquereux, 1861, Geo. Sur. Ky., vol. 4, Coal Meas. [Ety. proper name.]
- inflatus, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. inflated.]
- lactuca, Sternberg, 1833, (*Schizopteris lactuca*) Vers. Darst. Flora der Vorwelt, Coal Meas. [Sig. the plant Lettuce.]
- mollis, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. flexible.]
- myriophyllus, Brongniart, 1828, (*Sphenopteris myriophylla*) Prodr. Hist. Veg. Foss., Coal Meas. [Sig. many-leaved.]
- pentadactylus, Dawson, 1863, Can. Nat. & Geol., vol. 8, Coal Meas. [Sig. five-fingered.]
- pinnatifidus, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Ety. *pinnatus*, winged; *fidus*, cleft.]
- schlotheimi, Brongniart, 1828, (*Sphenopteris schlotheimi*) Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- spinosa, Göppert, 1841, (*Sphenopteris spinosa*) Gatt. Foss. Pflanzen, Coal Meas. [Sig. spiny.]
- splendens, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. splendid.]
- strongi, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. proper name.]
- subfurcatus, Dawson, 1868, Acad. Geol., Devonian. [Ety. from resemblance to *H. furcatus*.]
- tenuifolius, Brongniart, 1828, (*Sphenopteris tenuifolia*) Hist. Veg. Foss., Coal Meas. [Sig. slender-leaved.]
- thallyformis, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. frond-like.]
- trichomanoides, Brongniart, 1828, (*Sphenopteris trichomanoides*) Hist. Veg. Foss., Coal Meas. [Ety. from resemblance to *Trichomanes*, or maiden-hair.]
- tridactylites, Brongniart, 1828, (*Sphenopteris tridactylites*) Hist. Veg. Foss., Coal Meas. [Sig. three-fingered.]
- ICHNOPHYCUS, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *ichnos*, a foot print; *phukos*, a sea weed.]
- tridactylus, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. three-fingered.]
- KNORRIA, Sternberg, 1825, Vers. Darst. Flora der Vorwelt. [Ety. proper name.]
- imbricata, Sternberg, 1825, Vers. Darst. Flora der Vorwelt, Chester Gr. [Sig. imbricated.]
- selloni, Sternberg, 1825, Vers. Darst. Flora der Vorwelt, Coal Meas. [Ety. proper name.]
- taxina, Lindley & Hutton, 1833-5, Foss. Flora, Coal Meas. [Sig. like the Yew tree.]
- LEPIDODENDRON, Sternberg, 1821, Vers. Darst. Flora der Vorwelt. [Ety. *lepis*, a scale; *dendron*, a tree.]
- aculeatum, Sternberg, 1825, Vers. Darst. Flora der Vorwelt, Coal Meas. [Sig. very sharp or needle-like.]
- binerve, Bunbury, 1847, Quar. Jour. Geol. Soc., vol. 3, Coal Meas. [Sig. double nerved.]
- bordae, Wood, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Ety. proper name.]
- carinatum, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. the margins of the scars are keeled.]
- chemungense, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Ety. proper name.]
- chilalloeum, Wood, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Ety. *chilos*, fodder; *alloios*, of another kind.]
- clypeatum, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. a shield.]
- conicum, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. from the conical scars.]
- corrugatum, Dawson, 1862, Quar. Jour. Geol. Soc., vol. 18, Devonian and Low. Carb. [Sig. corrugated.]
- costatum, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. ribbed.]
- crenatum, Sternberg, 1820, Vers. Darst. Flora der Vorwelt, Coal Meas. [Sig. crenate.]
- cruciatum, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. tormented, twisted.]
- decurtatum, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. curtailed.]



- dichotomum, Sternberg, 1820, Vers. Darst. Flora der Vorwelt, Coal Meas. [Sig. dividing into two.]
- dikrocheilum, Wood, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Ety. two-edged.]
- dilatatum, Lindley & Hutton, 1833, Foss. Flora, Coal Meas. [Sig. widened.]
- diplostegiodes, Lesquereux, 1860, Geo. Sur. Ark., vol. 2, Coal Meas. [Sig. resembling *Diplostegium*.]
- distans, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. from the distant scars.]
- elegans, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. elegant.]
- forulatum, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. having long, narrow furrows.]
- gaspanum, Dawson, 1860, Can. Nat. & Geo., vol. 5, Catskill Gr. [Ety. proper name.]
- giganteum, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. very large.]
- gracile, Lindley & Hutton, 1833, Foss. Flora, Coal Meas. [Sig. slender.]
- greeni, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. proper name.]
- harcourti, Witham, 1832, Trans. Nat. Hist. Soc., New, upon Tyne, Coal Meas. [Ety. proper name.]
- mammillatum, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. mammillated.]
- mielecki, Göppert, 1836, Syst. Filic. Foss., Coal Meas. [Ety. proper name.]
- modulatum, Lesquereux, 1860, Geo. Sur. Ark., vol. 2, Coal Meas. [Sig. modulated.]
- morrisanum, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. proper name.]
- obovatum, Sternberg, 1820, Vers. Darst. Flora der Vorwelt, Coal Meas. [Ety. from the obovate scars.]
- obscurum, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. obscure, not distinct.]
- obtusum, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. from the obtuse bases of the scars.]
- oculatum, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. having eyes.]
- personatum, Dawson, 1863, Can. Nat. & Geo., vol. 8, Coal Meas. [Sig. masked.]
- pictoense, Dawson, 1863, Can. Nat. & Geo., vol. 8, Coal Meas. [Ety. proper name.]
- plicatum, Dawson, 1863, Can. Nat. & Geo., vol. 8, Coal Meas. [Sig. folded.]
- plumarium, Lindley & Hutton, 1835, Foss. Flora, vol. 2, Coal Meas. [Sig. embroidered with feathers.]
- primevum, Rogers, 1858, Geo. Sur. Penn., vol. 2, Ham. Gr. [Sig. first formed.]
- radiato-plicatum, Dawson, 1873, Rep. Foss. Plants, Low. Carb. [Ety. *radiatus*, radiated; *plicatus*, folded.]
- radicans, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. rooted.]
- rectangulum, Wood, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. rectangular.]
- rigens, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. stiff.]
- rimosum, Sternberg, 1820, Vers. Darst. Flora der Vorwelt, Coal Meas. [Sig. full of clefts.]
- rugosum, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. wrinkled.]
- rushvillense, Andrews, 1875, Ohio Pal., vol. 2, Coal Meas. [Ety. proper name.]
- salebrosus, Wood, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. rough.]
- scobiniforme, Meek, 1876, Desc. Foss. Plants Va., Ponent or Vespertine Gr., near the base of the Low. Carb. [Sig. rasp-like.]
- selaginoides, Sternberg, 1824, Vers. Darst. Flora der Vorwelt, Coal Meas. [Ety. from the plant *Selago*.]
- sigillarioides, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. from its resemblance to *Sigillaria*.]
- simplex, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. simple.]
- sternbergi, Lindley & Hutton, 1835, Foss. Flora, Coal Meas. [Ety. proper name.]
- tijoui, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. proper name.]
- tumidum, Bunbury, 1847, (Lepidophloios tumidum) Quar. Jour. Geo. Soc., vol. 3, Coal Meas. [Sig. tumid.]
- turbinatum, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. top-shaped.]
- undulatum, Gutbier, 1843, in Gaea von Sachsen, Coal Meas. [Sig. wavy.]
- ureum, Wood, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. belonging to the tail.]
- veltheimanum, Sternberg, 1823, Vers. Darst. Flora der Vorwelt, Chester Gr. [Ety. proper name.]
- vestitum, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. clothed, covered.]
- wortheni, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Ety. proper name.]
- LEPTOPHLEUM, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18. [Ety. *leptos*, slender; *phlois*, the bark of a tree.]
- rhombicum, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Devonian. [Sig. rhomb-like.]
- LEPIDOPHLOIOS, Sternberg, 1823, Vers. Darst. Flora der Vorwelt. [Ety. *lepis*, a scale; *phloios*, the bark.]
- acadianus, Dawson, 1863, Can. Nat. & Geo., vol. 8, Coal Meas. [Ety. proper name.]
- antiquus, Dawson, 1871, Foss. Plants Canada, Devonian. [Sig. ancient.]
- auriculatus, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. ear-like.]
- crassicaulis, Corda, 1833, in Flora der Vorwelt, vol. 2, Coal Meas. [Sig. thick-stemmed.]

- ichthyolepis, Wood, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Ety. *ichthys*, a fish; *lepis*, a scale.]  
 irregularis, Lesquereux, 1860, Geo. Sur. Ark., vol. 2, Coal Meas. [Sig. irregular.]  
 larinus, Sternberg, 1823, Vers. Darst. Flora der Vorwelt, Coal Meas. [Ety. from resemblance to the larch tree.]  
 lesquereuxi, Andrews, 1875, Ohio Pal. vol. 2, Coal Meas. [Ety. proper name.]  
 obcordatus, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. inversely, heart-shaped.]  
 parvus, Dawson, 1863, Can. Nat. & Geo., vol. 8, Coal Meas. [Sig. small.]  
 platystigma, Dawson, 1863, Can. Nat. & Geo., vol. 8, Coal Meas. [Sig. flat-scarred.]  
 prominulus, Dawson, 1863, Can. Nat. & Geo., vol. 8, Coal Meas. [Sig. projecting a little.]  
 protuberans, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. protuberant.]  
 tetragonus, Dawson, 1863, Can. Nat. & Geo., vol. 8, Coal Meas. [Sig. quadrangular.]  
*tumidus*, see *Lepidodendron tumidum*.  
**LEPIDOPHYLLUM**, Brongniart, 1828, Prodr. Hist. Veg. Foss. [Ety. *lepis*, a scale; *phyllon*, a leaf.]  
*acuminatum*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. sharp-pointed.] The name was preoccupied by Guthrie in 1843.  
*affine*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. closely related.]  
*auriculatum*, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. ear-shaped.]  
*brevifolium*, Lesquereux, 1858, Geo. Sur. Penn., Coal Meas. [Ety. *brevis*, short; *folium*, a leaf.]  
*foliaceum*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. leaf-like.]  
*hastatum*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. halbert-shaped.]  
*intermedium*, Lindley & Hutton, 1833, Foss. Flora, vol. 1, Coal Meas. [Sig. intermediate.]  
*lanceolatum*, Lindley & Hutton, 1831-33, Foss. Flora, Coal Meas. [Sig. lanceolate.]  
*majum*, Brongniart, 1828, Prodr. d'une Histoire de Vegetaux, Fossiles, Coal Meas. [Sig. large.]  
*obtusum*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. obtuse.]  
*plicatum*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. folded.]  
*rostellatum*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. little-beaked.]  
*striatum*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. striated.]  
*trinerve*, Lindley & Hutton, 1835, Foss. Flora, vol. 2, Coal Meas. [Sig. three-veined.]  
**LEPIDOSTROBUS**, Brongniart, 1828, Prodr. Hist. Veg. Foss. [Ety. *lepis*, a scale; *strobos*, a cone.]  
*connivens*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. dissembling, closing.]  
*globosus*, Dawson, 1861, Can. Nat. & Geo., vol. 6, Devonian. [Sig. globose.]  
*hastifolius*, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. spear-leaved.]  
*lanceifolius*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. lance-leaved.]  
*longifolius*, Dawson, 1863, Can. Nat. & Geo., vol. 8, Coal Meas. [Sig. long-leaved.]  
*oblongifolius*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. oblong-leaved.]  
*ornatus*, Parkinson, 1811, Organic Remains, Coal Meas. [Sig. ornate.]  
*ovatifolius*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. ovate-leaved.]  
*pinaster*, Lindley & Hutton, 1837, Foss. Flora, vol. 3, Coal Meas. [Sig. like the cone of a *Pinaster*.]  
*princeps*, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. original, principal.]  
*richardsoni*, Dawson, 1861, Can. Nat. & Geo., vol. 6, Devonian. [Ety. proper name.]  
*squamosus*, Dawson, 1863, Can. Nat. & Geo., vol. 8, Coal Meas. [Sig. scaly.]  
*trigonolepis*, Bunbury, 1847, Quar. Jour. Geo. Soc., vol. 3, Coal Meas. [Ety. from the triangular scars.]  
*truncatus*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. truncated.]  
*variabilis*, Lindley & Hutton, 1833, Foss. Flora, Coal Meas. [Sig. variable.]  
**LESCUROPTERIS**, Schimper, 1869, Palæontologie Vegetale. [Ety. proper name; *pteris*, a fern.]  
*moori*, Lesquereux, 1858, (Neuropteris moori) Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. proper name.]  
**LICROPHYCUS**, Billings, 1862, Pal. Foss., vol. 1, [Ety. *likros*, a fan; *phykos*, sea weed.]  
*formosus*, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. beautiful.]  
*hiltonensis*, Billings, 1862, Pal. Foss., vol. 1, Black Riv. & Trenton Gr. [Ety. proper name.]  
*hudsonicus*, Billings, 1862, Pal. Foss., vol. 1, Hud. Riv. Gr. [Ety. proper name.]  
*minor*, Billings, 1862, Pal. Foss., vol. 2, Trenton Gr. [Ety. *minor*, less; it is smaller than *ottawensis*.]  
*ottawensis*, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Ety. proper name.]  
*robustus*, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. robust.]  
*vagans*, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. wandering.]  
**LONCHOPTERIS**, Brongniart, 1828, Prodr. Hist. Veg. Foss. [Ety. *lonche*, a spear; *pteris*, fern.]

- tenuis*, Dawson, 1863, Can. Nat. & Geol., vol. 8, Coal Meas. [Sig. slender.]
- LYCOPODITES**, Brongniart, 1822, Mem. du Mus. d'Hist. Nat. de Paris. [Ety. from *Lycopodium*, the club moss.]
- annularifolius*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. with ring-shaped leaves.]
- asterophyllitæfolius*, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Ety. leaved like the *Asterophyllites*.]
- cavifolius*, see *Selaginites cavifolius*.
- comosus*, Dawson, 1863, Quar. Jour. Geo. Soc., vol. 19, Devonian. [Sig. hairy.]
- mathewi*, Dawson, 1861, Can. Nat. & Geol., vol. 6, Devonian. [Ety. proper name.]
- meeki*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. proper name.]
- plumulus*, Dawson, 1873, Rep. Foss. Plants, Low. Carb. [Sig. a little feather.]
- richardsoni*, Dawson, 1868, Quar. Jour. Geo. Soc., vol. 19, Devonian. [Ety. proper name.]
- vanuxemi*, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Chemung Gr. [Ety. proper name.]
- MEGALOPTERIS**, Dawson, 1875. Not defined. [Ety. *megale*, great; *pteris*, a fern.]
- dawsoni*, Hartt, 1868, (*Neuropteris dawsoni*) Acad. Geol., Devonian. [Ety. proper name.]
- hartti*, Andrews, 1875, Ohio Pal., vol. 2, Coal Meas. [Ety. proper name.]
- lata*, Andrews, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. wide.]
- minima*, Andrews, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. very small.]
- ovata*, Andrews, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. egg-shaped.]
- MEGAPHYTON**, Artis, 1838, Antedil. Phytol. [Ety. *megas*, great; *phyton*, a shoot.]
- humile*, Dawson, 1863, Can. Nat. & Geol., vol. 8, Coal Meas. [Sig. small, humble.]
- maclayi*, Lesquereux, 1860, Geo. Sur. Ill., vol. 2, Coal Meas. [Ety. proper name.]
- magnificum*, Dawson, 1863, Can. Nat. & Geol., vol. 8, Coal Meas. [Sig. splendid.]
- protuberans*, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. protuberant.]
- MYRIANITES**, Murchison, 1839, Sil. Syst. [Ety. *myrias*, innumerable.]
- murchisoni*, Emmons, 1844, Taconic. Syst., Potsdam Gr. [Ety. proper name.]
- sillimani*, Emmons, 1844, Taconic. Syst., Potsdam Gr. [Ety. proper name.]
- NEMAPODIA**, Emmons, 1844, Taconic. Syst., [Ety. *nema*, thread; *podion*, foot.]
- tenuissima*, Emmons, 1844, Taconic. Syst., Potsdam Gr. [Sig. fine-lined.] Prof. Hall regards this as a recent track.]
- NEMATOPHYCUS**, Carruthers, 1872, Month. Micro. Jour. [Ety. *nematos*, a thread; *phukos*, sea weed.] This is a syn. for *Prototaxites*.
- logani*, Carruthers, 1872, Month. Micro. Jour., Devonian. [Ety. proper name.] Syn. for *Prototaxites logani*.
- NEMATOXYLON**, Dawson, 1863, Quar. Jour. Geo. Soc., vol. 19. [Ety. *nema*, a thread; *xylon*, wood.] Carruthers says this is a syn. for *Prototaxites* and belongs to the *Alga*.
- crassum*, Dawson, 1863, Quar. Jour. Geo. Soc., vol. 19, Devonian. [Sig. thick.] Carruthers says this is a syn. for *Prototaxites logani*.]
- tenuis*, Dawson, 1863, Quar. Jour. Geo. Soc., vol. 19, Devonian. [Sig. slender.] Carruthers says this is a syn. for *Prototaxites logani*.]
- Nephropteris**, Brongniart, 1828, Tab. des gener. elegans, see *Cyclopteris elegans*.
- fimbriata*, see *Neuropteris fimbriata*.
- germari*, see *Cyclopteris germari*.
- hirsuta*, see *Cyclopteris hirsuta*.
- laciniata*, see *Cyclopteris laciniata*.
- orbicularis*, see *Cyclopteris orbicularis*.
- trichomanoides*, see *Cyclopteris trichomanoides*.
- undans*, see *Cyclopteris undans*.
- NEREITES**, Murchison, 1839, Sil. Syst. [Ety. from a resemblance to the track of the *Nereis*.] Prof. Hall says these species are of Devonian age.
- deweyi*, Emmons, 1844, Taconic. Syst., Potsdam Gr. [Ety. proper name.]
- gracilis*, Emmons, 1844, Taconic. Syst., Potsdam Gr. [Sig. slender.]
- jacksoni*, Emmons, 1844, Taconic. Syst., Potsdam Gr. [Ety. proper name.]
- lanceolatus*, Emmons, 1844, Taconic. Syst., Potsdam Gr. [Sig. sword-like.]
- loomisi*, Emmons, 1844, Taconic. Syst., Potsdam Gr. [Ety. proper name.]
- pugnus*, Emmons, 1844, Taconic. Syst., Potsdam Gr. [Sig. a hand full.]
- NERIOPTERIS**, Newberry, 1873, Ohio Pal., vol. 1. [Ety. *nerion*, the Oleander; *pteris*, a fern.]
- lanceolata*, Newberry, 1873, Ohio Pal., vol. 1, Coal Meas. [Sig. spear-shaped.]
- NEUROPTERIS**, Brongniart, 1822, Mem. du Mus. d'Hist. Nat. de Paris. [Ety. *neuron*, a nerve; *pteris*, a fern.]
- acutifolia*, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. acute-leaved.]
- adiantites*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. from resemblance to *Adiantum*, the maiden hair fern.]
- angustifolia*, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. narrow-leaved.]
- attenuata*, Lindley & Hutton, 1837, Foss. Flora, vol. 3, Coal Meas. [Sig. attenuated.]
- auriculata*, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. eared.]
- capitata*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. capitate.]
- cisti*, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- clarksoni*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. proper name.]

- collinsi*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. proper name.]  
*cordata*, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. heart-shaped.]  
*coriacea*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. having the texture of rough skin.]  
*crassa*, Dawson, 1868, Acad. Geol., Devonian. [Sig. thick.]  
*crenulata*, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. crenulated.]  
*cyclopteroides*, Dawson, 1863, Can. Nat. & Geol., vol. 8, Coal Meas. [Sig. like *Cyclopteris*.]  
*dawsoni*, see *Megalopteris dawsoni*.  
*delicatula*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. small and delicate.]  
*dentata*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. toothed.]  
*desori*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. proper name.]  
*eveni*, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Ety. proper name.]  
*fasciculata*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. faggot-like, in bundles.]  
*fimbriata*, Lesquereux, 1854, Jour. Bost. Soc. Nat. Hist., Coal Meas. [Sig. fringed.]  
*fissa*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. split.]  
*flexuosa*, Sternberg, 1825, Vers. Darst. Flora der Vorwelt, Coal Meas. [Sig. wavy.]  
*gibbosa*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. gibbous.]  
*gigantea*, Sternberg, 1825, Vers. Darst. Flora der Vorwelt, Coal Meas. [Sig. very large.]  
*grangeri*, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. proper name.]  
*heterophylla*, Brongniart, 1822, (Filicites heterophylla) Mem. du Mus. d'Hist. Nat. de Paris, Coal Meas. [Ety. *heteros*, different; *phyllon*, a leaf.]  
*hirsuta*, Lesquereux, 1854, Bost. Jour. Nat. Hist., Coal Meas. [Sig. hairy.]  
*inflata*, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. inflated.]  
*ingens*, Lindley & Hutton, 1833, Foss. Flora, Coal Meas. [Sig. huge.]  
*lacerata*, syn. for *Neuropteris fimbriata*.  
*linnaeifolia*, Bunbury, 1847, Quar. Jour. Geo. Soc., vol. 3, Coal Meas. [Ety. from a resemblance to the leaves of *Linnaea borealis*.]  
*loshi*, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. proper name.]  
*marginata*, see *Alethopteris marginata*.  
*microphylla*, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. small-leaved.]  
*minor*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. less.]  
*moori*, see *Lescuropteris moori*.  
*pachyderma*, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. thick-barked.]  
*perelegans*, Dawson, 1863, Can. Nat. & Geol., vol. 8, Coal Meas. [Sig. very elegant.]  
*plicata*, Sternberg, 1825, Vers. Darst. Flora der Vorwelt, Coal Meas. [Sig. folded.]  
*polymorpha*, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Devonian. [Sig. many-formed.]  
*rarinervis*, Bunbury, 1847, Quar. Jour. Geo. Soc., vol. 3, Coal Meas. [Ety. *rarus*, few; *nervus*, a vein.]  
*retorquata*, Dawson, 1871, Foss. Plants Canada, Devonian. [Sig. turned back.]  
*rogersi*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. proper name.]  
*rotundifolia*, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. round-leaved.]  
*selwyni*, Dawson, 1871, Foss. Plants Canada, Devonian. [Ety. proper name.]  
*serrulata*, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Devonian. [Sig. like a little saw.]  
*smilacifolia*, Sternberg, 1824, Vers. Darst. Flora der Vorwelt, Coal Meas. [Ety. *Smilax*, an existing genus; *folium*, a leaf.]  
*soreti*, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. proper name.]  
*speciosa*, Lesquereux, see *N. rogersi*.  
*tenuifolia*, Sternberg, 1825, Vers. Darst. Flora der Vorwelt, Coal Meas. [Ety. *tenuis*, narrow; *folium*, a leaf.]  
*tenuinervis*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. fine-veined.]  
*undans*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. wavy.]  
*verbenæfolia*, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. leaved like the *Verbena*.]  
*vermicularis*, Lesquereux, 1861, Geo. Sur. Ky., vol. 4, Coal Meas. [Sig. worm-shaped.]  
*villiersi*, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]  
*voltzi*, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]  
*NÆGGERATHIA*, Sternberg, 1822, Vers. Darst. Flora der Vorwelt. [Ety. proper name.]  
*beinertiana*, Gœppert, 1842, Gatt. d. Foss. Pflanzen, Coal Meas. [Ety. proper name.]  
*bockschi*, Gœppert, 1836, (Cyclopteris bockschi) Syst. Filic. Foss., Coal Meas. [Ety. proper name.]  
*bockschiana*, syn. for *N. bockschi*.  
*dispar*, Dawson, 1863, Can. Nat. & Geol., vol. 8, Coal Meas. [Sig. different.]  
*flabellata*, Lindley & Hutton, 1833, Foss. Flora, vol. 1, Coal Meas. [Sig. spread out like a fan.]  
*gilboensis*, Dawson, 1871, Quar. Jour. Geo. Soc., vol. 27, Devonian. [Ety. proper name.]  
*minor*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. from the small leaves.]

- obliqua, Goeppert, 1841, Gatt. Foss. Pflanzen, Coal Meas. [Ety. from the oblique attachment of the leaves.]
- obtusa, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. *obtusus*, from the blunt termination of the leaf.] Prof. Dawson refers this species to the genus *Cyclopteris*.
- ODONTOPTERIS, Brongniart, 1822, Mem. du Mus. d'Hist. Nat. de Paris. [Ety. *odus*, a tooth; *ptēris*, a fern.]
- æqualis, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. equal, of the same shape as another.]
- alata, Lesquereux, 1858, Catal. Pottsville Foss., Coal Meas. [Sig. winged.]
- antiqua, Dawson, 1863, Can. Nat. & Geo., Coal Meas. [Sig. ancient.]
- bradleyi, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. proper name.]
- brardi, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- crenulata, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. crenulated.]
- dubia, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. doubtful.]
- gracillima, Newberry, 1873, Ohio Pal., vol. 1, Coal Meas. [Sig. very slender.]
- heterophylla, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Ety. *heteros*, different; *phyllon*, a leaf.]
- intermedia, Lesquereux, 1860, Geo. Sur. Ark., vol. 2, Coal Meas. [Sig. intermediate.]
- neuropteroides, Newberry, 1873, Ohio Pal., vol. 1, Lower, Coal Meas. [Ety. from its resemblance to *Neuropteris*.]
- schlotheimi, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- squamosa, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. scaly.]
- subcuneata, Bunbury, 1847, Quar. Geo. Jour., vol. 3, Coal Meas. [Sig. somewhat wedge-shaped.]
- wortheni, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Ety. proper name.]
- ORMOXYLON, Dawson, 1871, Foss. Plants Canada. (Ety. *ormos*, a chain, a cord; *xylon*, wood.)
- erianum, Dawson, 1871, Foss. Plants Canada, Devonian. [Ety. proper name.]
- ORTHOGONIOPTERIS, Andrews, 1875, Ohio Pal., vol. 2. [Ety. *orthogoniopteris*, rectangular-fern.]
- clara, Andrews, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. clear, distinct.]
- gilberti, Andrews, 1875, Ohio Pal., vol. 2, Coal Meas. [Ety. proper name.]
- Pachyphyllum*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2. [Ety. *pachys*, thick; *phyllon*, a leaf.] This name was preoccupied in the class Polypi. See *Rhacophyllum*.
- affine*, see *Rhacophyllum affine*.
- fimbriatum*, see *Rhacophyllum fimbriatum*.
- hirsutum*, see *Rhacophyllum hirsutum*.
- laceratum*, see *Rhacophyllum laceratum*.
- lactuca*, see *Rhacophyllum lactuca*.
- PACHYPTERIS, Brongniart, 1828, Prodr. Hist. Veg. Foss. [Ety. *pachys*, thick; *ptēris*, fern.]
- gracillima, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. very slender.]
- PALÆOCHORDA, McCoy, 1849, Quar. Jour. Geol. Soc., vol. 4. [Ety. *palaaios*, ancient; *chorde*, an intestine.]
- marina, Fitch, 1856, Am. Geol., Potsdam Gr. [Sig. pertaining to the sea.]
- tenuis, Fitch, 1856, Am. Geol., Potsdam Gr. [Sig. slender.]
- PALÆOPHYCUS, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *palaaios*, ancient; *phykos*, seaweed.]
- articulatus, Winchell, 1864, Am. Jour. Sci. & Arts, 2d series, vol. 37, Potsdam Gr. [Ety. from the articulated stems.]
- beauharnoisensis, Billings, 1862, Pal. Foss., vol. 1, Calif. Gr. [Ety. proper name.]
- beverleyensis, Billings, 1862, Pal. Foss., vol. 1, Potsdam Gr. [Ety. proper name.]
- congregatus, Billings, 1861, Pal. Foss., vol. 1, Potsdam Gr. [Sig. assembled together.]
- divaricatus, Lesquereux, 1876, 7th Ann. Rep. Geol. Sur. Ind., Coal Meas. [Sig. wide apart.]
- funiculus, Billings, 1862, Pal. Foss., vol. 1, Calif. Gr. [Sig. a rope.]
- gracilis, Lesquereux, 1876, 7th Ann. Rep. Geol. Sur. Ind., Coal Meas. [Sig. slender.]
- incipiens, Billings, 1861, Pal. Foss., vol. 1, Potsdam Gr. [Sig. the beginning.]
- informis, Winchell, 1864, Am. Jour. Sci. & Arts, vol. 87, Potsdam Gr. [Sig. shapeless.]
- irregularis, Hall, 1847, Pal. N. Y., vol. 1, Calif. Gr. [Sig. irregular.]
- milleri, Lesquereux, 1876, 7th Ann. Rep. Geol. Sur. Ind., Coal Meas. [Ety. proper name.]
- obscurus, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Sig. obscure.]
- rogosus, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. full of wrinkles.]
- simplex, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. simple.]
- striatus, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. striated.]
- tortuosus, Hall, 1852, Pal. N. Y., vol. 2, Medina sandstone. [Ety. from the tortuous branches.]
- tubularis, Hall, 1847, Pal. N. Y., vol. 1, Calif. Gr. [Sig. hollow like a pipe.]
- virgatus, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. twig-like.]
- Palaopteris*, being preoccupied, see *Archæopteris*.
- acadica*, see *Archæopteris acadica*.
- hartii*, see *Archæopteris hartii*.
- PALEOXYRIS, Brongniart, 1828, Ann. Sc. Nat., vol. 15. [Ety. *palaaios*, ancient; *Xyris*, a plant.]
- appendiculata, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. having lateral appendages.]

- corrugata, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. corrugated.]  
 prendeli, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. proper name.]  
**PECOPTERIS**, Brongniart, 1822, Mem. du Mus. d'Hist. Nat. de Paris. [Ety. *peko*, to comb; *pterus*, a fern.]  
 abbreviata, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. from the short lobes of the pinnules.]  
 acuta, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. acute.]  
 æqualis, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. equal.]  
*aquilina*, see *Alethopteris aquilina*.  
 arborescens, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. tree-like.]  
 arguta, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. sharply defined.]  
 aspidioides, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. like the *Aspidium*.]  
 bucklandi, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]  
 bullata, Bunbury, 1847, Quar. Jour. Geo. Soc., vol. 3, Coal Meas. [Sig. bossed.]  
 callosa, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. having a thick covering.]  
 candollana, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]  
 chaerophylloides, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. like the *Chaerophyllum*.]  
 cisti, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. proper name.]  
*concinna*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. neat.] The name was preoccupied by Presl in 1833.  
*crenulata*, see *Alethopteris crenulata*.  
*cristata*, see *Alethopteris cristata*.  
 cyathea, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. *kyathos*, a cup.]  
 decurrens, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. from the decurrent nature of the leaves.]  
*decurrens*, Dawson, 1862. The name was preoccupied, see P. discrepans.  
 densifolia, Dawson, 1874, Foss. Plants, Can., Devonian. [Sig. dense-leaved.]  
 dentata, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. toothed.]  
 discrepans, Dawson, 1863, Quar. Jour. Geo. Soc., vol. 19, Devonian. [Sig. different.]  
*distans*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. from the distant pinules.] The name was preoccupied by Rost in 1839.  
 dubia, Gutbier, 1843, in Gæa von Sachsen, Coal Meas. [Sig. doubtful.]  
 elegans, Gœppert, 1836, Syst. Filic. Foss., Coal Meas. [Sig. elegant.]  
 elliptica, Bunbury, 1846, Quar. Jour. Geo. Soc., vol. 2, Coal Meas. [Sig. elliptical.]  
 emarginata, Gœppert, 1836, (Diplazites emarginata) Syst. Filic. Foss., Coal Meas. [Sig. notched.]  
*erosa*, see *Alethopteris erosa*.  
 flavicans, Presl, 1833, in Sternberg, Vers. Darst. Flora der Vorwelt, Coal Meas. [Sig. yellow (?).]  
 hemiteloides, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. like *Hemitelites*.]  
*heterophylla*, Lindley & Hutton, see *Alethopteris heterophylla*.  
*heterophylla*, Dawson, syn. for P. mantelli.  
 incompleta, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. from the incomplete condition of the specimen.]  
 ingens, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Devonian. [Sig. huge, enormous.]  
 lepidorhachis, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. *lepis*, a scale; *rachis*, a ridge.]  
 longifolia, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. long-leaved.]  
*Alethopteris longifolia*. (?)  
 loshi, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]  
 mantelli, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]  
 milleri, Harlan, 1835, Trans. Geo. Soc. Penn., Coal Meas. [Ety. proper name.]  
*muricata*, see *Alethopteris muricata*.  
 murrayana, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. proper name.]  
*nervosa*, see *Alethopteris nervosa*.  
 newberryi, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. proper name.]  
 notata, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. dotted.]  
 obsoleta, Harlan, 1835, Trans. Geo. Soc. Penn., Coal Meas. [Sig. obsolete.]  
 oreopteroides, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. like the fern *Oreopteris*.]  
 ovata, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. ovate.]  
 ovata, Gutbier, 1843, in Gæa von Sachsen, Coal Meas. The name was preoccupied.  
 pennæformis, Brongniart, 1822, (Filicites pennæformis) Mem. du Mus. d'Hist. Nat. de Paris, Coal Meas. [Sig. feather-formed.]  
*pluckeneti*, see *Alethopteris pluckeneti*.  
 plumosa, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. feathery.]  
 polymorpha, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. many-formed.]  
 preciosa, Hartt, 1868, Acad. Geo., Devonian. [Sig. precious, splendid.]  
*pteroides*, see *Alethopteris pteroides*.



- pusilla, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. very small.]  
 rigida, Dawson, 1863, Can. Nat. & Geo., vol. 8, Coal Meas. [Sig. inflexible.]  
*serlii*, see *Alethopteris serlii*.  
 serrulata, Hartt, 1868, Acad. Geo., Devonian. [Sig. like a small saw.]  
*shaefferi*, Lesquereux, 1858, Catal. Potts. Foss., Coal Meas. [Ety. proper name.]  
 sillimani, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. proper name.]  
 squamosa, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. scaly.]  
 strongi, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. proper name.]  
 tæniopteroides, Bunbury, 1847, Quar. Jour. Geo. Soc., vol. 3, Coal Meas. [Sig. like *Tæniopteris*.]  
 tenuis, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. slender.]  
 unita, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. from the united pinnules.]  
*urophylla*, see *Alethopteris urophylla*.  
 velutina, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. velvety.]  
 villosa, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. covered with short hair-like projections.]
- PHYLOPTERIS**, Brongniart, 1828, Tab. d. Gen., etc. [Ety. *phyllon*, a leaf; *ptēris*, a fern.]  
*antiqua*, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. ancient.]  
*Phytolithus*, Martin, 1809, Petrificata Derbienia. [Ety. *phyton*, a plant; *lithos*, stone.]  
*cancellatus*, see *Sigillaria cancellata*.  
*dawsoni*, see *Sigillaria dawsoni*.  
*decoratus*, see *Calamites decoratus*.  
*martini*, see *Sigillaria martini*.  
*notatus*, see *Sigillaria notata*.  
*reticulatus*, see *Stigmaria reticulata*.  
*sulcatus*, see *Calamites sulcatus*.  
*tessellatus*, see *Sigillaria tessellata*.  
*transversus*, see *Artisia transversa*.  
*verrucosus*, see *Stigmaria verrucosa*.
- PHYSOPHYCUS**, Schimper, 1869, Pal. Veg. [Ety. *phyton*, a plant; *phykos*, a sea weed.]  
*marginatus*, Lesquereux, 1866, (Caulerpietes marginatus) Trans. Am. Phil. Soc., vol. 13, Coal Meas. [Sig. margined.]
- PHYTOPSIS**, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *phyton*, a plant; *opsis*, resemblance.]  
*cellulosum*, Hall, 1847, Pal. N. Y., vol. 1, Birdseye Gr. [Sig. from the cellular substance.]  
*tubulosum*, Hall, 1847, Pal. N. Y., vol. 1, Birdseye Gr. [Sig. abounding in tubes.]
- PINNULARIA**, Lindley & Hutton, 1835, Foss. Flora, vol. 2. [Ety. *pinnula*, a feather.]  
*calamitarum*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. like the genus *Calamites*.]  
*capillacea*, Lindley & Hutton, 1835, Foss. Flora, Coal Meas. [Sig. stringy, as the roots of herbs.]  
*confervoides*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. like *Conferva*.]
- crassa*, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. thick.]  
*dispalans*, Dawson, 1852, Quar. Jour. Geo. Soc., vol. 18, Devonian. [Sig. straggling, stray.]  
*elongata*, Dawson, 1871, Foss. Plants Can., Devonian. [Sig. lengthened.]  
*fucoides*, Lesquereux, 1868, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. *fucus*, sea weed; *eidos*, likeness.]  
*horizontalis*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. horizontal.]  
*nodosa*, Dawson, 1871, Foss. Plants Can., Devonian. [Sig. knotty.]  
*pinnata*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. winged.]  
*ramosissima*, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. very branchy.]
- POLYPORITES**, Lindley & Hutton, 1833, Foss. Flora. [Ety. from its resemblance to the *Polyporus versicolor*.]  
*bowmanni*, Lindley & Hutton, 1833, Foss. Flora, Coal Meas. [Ety. proper name.]  
*polysporus*, Newberry, 1873, Ohio Pal., vol. 1. [Ety. *polys*, many; *sporos*, seed.]  
*mirabilis*, Newberry, 1873, Ohio Pal., vol. 1, Coal Meas. [Sig. wonderful, strange.]
- PROTOTAXITES**, Dawson, 1859, Quar. Jour. Geo. Soc., vol. 15. [Ety. *protos*, first; *taxis*, Yew tree; so named from the spirally marked cells characteristic of the genus *Taxites*.] Carruthers says it is an Alga and has therefore called it *Nematophycus*.  
*logani*, Dawson, 1859, Quar. Jour. Geo. Soc., vol. 15, Devonian. [Ety. proper name.] This is the oldest known tree in America, according to Dawson, but Carruthers says it is a huge sea-weed and has named it *Nematophycus logani*.
- PSARONIUS**, Cotta, 1832, Dendrol. in Beziehung. [Ety. *psaros*, speckled.]  
*erianus*, Dawson, 1871, Foss. Plants Can., Devonian. [Ety. proper name.]  
*textilis*, Dawson, 1871, Foss. Plants Can., Devonian. [Sig. woven, like a web.]
- PSILOPHYTON**, Dawson, 1859, Quar. Jour. Geo. Soc., vol. 15. [Ety. *psilon*, smooth; *phyton*, stem.]  
*elegans*, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Devonian. [Sig. elegant.]  
*glabrum*, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Devonian. [Sig. without hair, smooth.]  
*principes*, Dawson, 1859, Quar. Jour. Geo. Soc., Upper Silurian and Devonian. [Sig. original, principal.] This is the oldest known plant in America. It is supposed to have grown in a marsh.  
*robustius*, Dawson, 1859, Quar. Jour. Geo. Soc., vol. 15, Devonian. [Sig. strong, like oak.]
- PTILOCARPUS**, Lesquereux, 1870, Geo. Sur. Ill., vol. 4. [Ety. *ptilon*, a wing; *karpus*, fruit.]

- bicornutus, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. from two short horns at the base.]
- RHABDOCARPUS**, Göppert & Berger, 1848, de Fruct. et Sem. [Ety. *rhabdos*, stria; *karpus*, fruit.]
- acuminatus, Newberry, 1873, Ohio Pal., vol. 1, Coal Meas. [Sig. pointed.]
- amygdaliformis, Göppert & Berger, 1848, de Fruct et Sem., Coal Meas. [Sig. like the almond, *Amygdalus*.]
- apiculatus, Newberry, 1873, Ohio Pal., vol. 1, Coal Meas. [Sig. pointed.]
- arcuatus, Lesquereux, 1861, Geo. Sur. Ky., Coal Meas. [Sig. bent.]
- carinatus, Newberry, 1873, Ohio Pal., vol. 1, Coal Meas. [Sig. keeled.]
- clavatus, Sternberg, 1820, (Carpolithes clavatus) Vers. Darst. Flora der Vorwelt, Coal Meas. [Sig. club-shaped.]
- costatus, Newberry, 1873, Ohio Pal., vol. 1, Coal Meas. [Sig. ribbed.]
- danai, Foster, 1854, Ann. of Sci., vol. 1, Coal Meas. [Ety. proper name.]
- insignis, Dawson, 1863, Can. Nat. & Geo., vol. 8, Coal Meas. [Sig. remarkable.]
- lævis, Newberry, 1873, Ohio Pal., vol. 1, Coal Meas. [Sig. smooth.]
- mammillatus, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. mammillated.]
- minutus, Lesquereux, 1860, Geo. Sur. Ark., vol. 2, Coal Meas. [Sig. very small.]
- venosus, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. full of veins.]
- RHACHOPTERIS**, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18. [Ety. *rachis*, a ridge; *pteria*, a fern.]
- cyclopteroides, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Catskill Gr. [Ety. like the genus *Cyclopterus*.]
- gigantea, Dawson, 1871, Foss. Plants Can., Devonian. [Sig. very large.]
- palmata, Dawson, 1870, Proc. Royal Soc., Devonian. [Sig. like the palm tree.]
- pinnata, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Ham. Gr. [Sig. feathered.]
- punctata, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Catskill Gr. [Sig. punctured.]
- striata, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Ham. Gr. [Sig. striated.]
- tenuistriata, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Ham. Gr. [Sig. fine-lined.]
- RHACOPHYLLUM**, Schimper, 1869, Palæontologie Vegetale. [Ety. *rakos*, rugged; *phyllon*, a leaf.]
- affine, Lesquereux, 1858, (Pachyphyllum affine) Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. near to; related to *R. fimbriatum*.]
- fimbriatum, Lesquereux, 1858, (Pachyphyllum fimbriatum) Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. fringed.]
- hirsutum, Lesquereux, 1858, (Pachyphyllum hirsutum) Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. hairy.]
- laceratum, Lesquereux, 1858, (Pachyphyllum laceratum) Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. lacerated.]
- lactuca, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. *lactuca*, Lettuce.]
- Rhizolites*, F. Braun, 1847, in Flora, etc. [Ety. *rhiza*, a root; *lithos*, stone.]
- palmatifidus, Lesquereux, 1860, Geo. Sur. Ark., vol. 2, Coal Meas. [Sig. divided like a hand.]
- RHIZOMOPTERIS**, Schimper, 1869, Traite de Palæontologie Vegetale. [Sig. the rhizomas of ferns.] This was formed to include *Selaginites uncinatus* and *S. erdmanni*.]
- Rotularia longifolia*, see *Sphenophyllum longifolium*.
- RUSOPHYCUS**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *rusos*, rugose; *phykos*, sea-plant.]
- bilobatus, Vanuxem, 1842, (Fucoides bilobatus) Geo. Rep. N. Y., Cin'ti & Clinton Gr. [Sig. two-lobed.]
- clavatus, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. club-shaped.]
- grenvillensis, Billings, 1862, Pal. Foss., vol. 1, Chazy Gr. [Ety. proper name.]
- pudicus, Hall, 1852, Pal. N. Y., vol. 2, Hud. Riv. & Clinton Gr. [Sig. shame-faced, modest.]
- subangulatus, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. somewhat angulated.]
- Sagenaria*, Brongniart, 1822, Memoires du Museum d'Histoire Naturelle.
- veltheimiana*, see *Lepidodendron veltheimanum*.
- Schizopteris*, Brongniart, 1828, Hist. Veg. Foss. [Ety. *schizo*, to cleave; *pteria*, a fern.]
- lactuca*, see *Hymenophyllites lactuca*.
- SCHUTZIA**, Göppert, 1848, Permian Flora. [Ety. proper name.]
- bracteata, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. covered with leaves or plates.]
- SCOLITHUS**, Haldeman, 1840, Supp. to Monograph of Limniades. [Ety. *scoler*, a worm; *lithos*, a stone.]
- canadensis, Billings, 1862, Pal. Foss., vol. 1, Potsdam Gr. [Ety. proper name.]
- linearis, Hall, 1847, Pal. N. Y., vol. 1, Potsdam to Hud. Riv. Gr. [Sig. drawn out in lines.]
- verticalis, Hall, 1852, Pal. N. Y., vol. 2, Medina sandstone. [Ety. from penetrating the strata vertically.]
- SCOLOPENDRITES**, Lesquereux, 1858, Geo. Sur. Penn., vol. 2. [Ety. from the living fern *Scolopendrium*.]
- dentatus, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. *dentatus*, toothed.] In the text the specific name is written *grosse-dentata*, a Franco-Latin hybrid, but on plate 8, fig. 7, the name is corrected by leaving off the French.
- SELAGINITES**, Brongniart, 1828, Prodr. Hist. Veg. Foss. [Ety. from the plant *Selago*.]



- cavifolius, Lesquereux, 1861, (Lycopodites cavifolius) Geo. Rep. Ky., vol. 4, Coal Meas. [Sig. hollow-leaved.]
- crassus, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. thick, stout.]
- formosus, Dawson, 1861, Can. Nat., vol. 6, Devonian. [Sig. beautiful.]
- uncinatus, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. hooked.]
- SIGILLARIA, Brongniart, 1822, Mem. du Mus. d'Hist. Nat. de Paris. [Ety. *sigillum*, a seal; from the seal-like scars of fallen leaves stamped upon the bark.]
- alternans, Lindley & Hutton, 1831-33, Foss. Flora, Coal Meas. [Sig. alternating.]
- alveolaris, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. *alveolus*, a small channel.]
- angusta, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. narrow.]
- attenuata, Lesquereux, 1858, Catal. Potts. Foss., Coal Meas. [Sig. attenuated.]
- brardi, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- bretonensis Dawson, 1868, Can. Nat. & Geo., 2nd series, vol. 3, Coal Meas. [Ety. proper name.]
- brochanti, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- browni, Dawson, 1861, Quar. Jour. Geo. Soc., vol. 17, Coal Meas. [Ety. proper name.]
- cancellata, Martin, 1809, (Phytolithus cancellatus) Petrif. Derb., Coal Meas. [Sig. cancellated.]
- catenoides, Dawson, 1868, Can. Nat. & Geo., 2nd series, vol. 3, Coal Meas. [Sig. chain-like.]
- catenulata, Lindley & Hutton, 1831-33, Foss. Flora, Coal Meas. [Sig. linked together in a chain.] Probably syn. for *S. alternans*.
- chemungensis, Hall, 1843, Geo. Rep. 4th Dist. N.Y., Chemung Gr. [Ety. proper name.]
- cisti, see *Caulopteris cisti*.
- corrugata, Lesquereux, 1861, Geo. Sur. Ky., vol. 4; redefined 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. corrugated.]
- cymatoides, Wood, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Ety. wave-like.]
- dawsoni, Steinhaur, 1818, (Phytolithus dawsoni) Trans. Am. Phil. Assoc., Coal Meas. [Ety. proper name.]
- defranci, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- dilatata, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. expanded.]
- discoidea, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. from the discoidal shape of the scars.]
- dournaisi, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- dubia, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. doubtful.]
- elegans, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. elegant.]
- elongata, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. from the elongated scars.]
- eminens, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. standing out in relief, prominent.]
- fissa, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. divided, from the deeply emarginate scars.]
- flexuosa, Lindley & Hutton, 1837, Foss. Flora, vol. 3, Coal Meas. [Sig. full of flexures.]
- intermedia, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. intermediate.]
- knorri, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- lævigata, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. smoothed.]
- lepidodendrifolia, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. leaved like the *Lepidodendron*.]
- lescuræi, Schimper, 1869, Traité de Palæontologie Végétale, Coal Meas. [Ety. proper name.]
- lorwayana, Dawson, 1873, Foss. Plants, Low. Carb. [Ety. proper name.]
- martini, Steinhaur, 1818, (Phytolithus martini) Trans. Amer. Phil. Assoc., Coal Meas. [Ety. proper name.]
- massiliensis, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. proper name.]
- menardi, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- monostigma, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. single-dotted.]
- notata, Steinhaur, 1818, (Phytolithus notatus) Trans. Am. Phil. Assoc., Coal Meas. [Sig. marked.]
- obliqua, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. from the oblique scars.]
- obovata, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. obovate.]
- oculata, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. *oculus*, an eye.]
- organum, Lindley & Hutton, 1833, Foss. Flora, vol. 1, Coal Meas. [Sig. an instrument or pipe.]
- pachyderma, Brongniart, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. thick-barked.]
- palpebra, Dawson, 1860, Quar. Jour. Geo. Soc., vol. 8, Devon. [Sig. an eye-lid.]
- planicosta, Dawson, 1863, Can. Nat. & Geo., vol. 8, Coal Meas. [Sig. smooth-ribbed.]
- polita, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. smoothed.]
- reniformis, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. kidney-shaped.]

- reticulata, Steinhaur, 1818, (Phytolithus reticulatus) Trans. Am. Phil. Assoc., Coal Meas. [Sig. reticulated.]
- reticulata*, Lesquereux, 1860, Geo. Sur. Ark., vol. 2, Coal Meas. [Sig. reticulated.]
- rugosa*, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. wrinkled.]
- saulii*, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- schimperii*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. proper name.]
- schlotheimiana*, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. proper name.] American Sp. (?)
- sculpta*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. engraved.]
- scutellata*, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. a little shield.]
- semina*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. seeds of Sigillaria.]
- serlii*, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- sillimani*, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- simplicitas*, Vanuxem, 1843, Geo. Rep. N. Y., Catskill Gr. [Sig. from the straightness of grain.]
- spinulosa*, Germ., 1853, Vers. v. Wett, etc., Coal Meas. [Sig. full of spines.]
- stellata*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. from the radiating wrinkles around the scars.]
- striata*, Dawson, 1863, Can. Nat. & Geol., vol. 8, Coal Meas. [Sig. striated.] The name was preoccupied by Brongniart in 1828.
- sydenensis*, Dawson, 1863, Can. Nat. & Geol., vol. 8, Coal Meas. [Ety. proper name.]
- tessellata*, Steinhaur, 1818, (Phytolithus tessellatus) Trans. Am. Phil. Assoc. [Sig. from the square scars.]
- tessellata*, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. The name was preoccupied.
- vanuxemi*, Göppert, 1836, Flora Silurisch, Chemung Gr. [Ety. proper name.]
- yardleyi*, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Ety. proper name.]
- SIGILLARIOIDES**, Lesquereux, 1870, Geo. Sur. Ill., vol. 4. [Ety. from its resemblance to the genus *Sigillaria*.]
- radicans*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. rooted.]
- stellaris*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. starred.]
- SPHENOPHYLLUM**, Brongniart, 1828, Prodr. Hist. Veg. Foss. [Ety. *sphen*, a wedge; *phyllon*, a leaf.] This genus was called *Sphenophyllites* by Brongniart in 1822.
- antiquum*, Dawson, 1861, Can. Nat., vol. 6, Devonian. [Sig. ancient.]
- bifurcatum*, Lesquereux, 1860, Geo. Sur. Ark., vol. 2, Coal Meas. [Sig. bifurcated.]
- brevifolium*, Newberry, 1854, Ann. of Sci., vol. 1, Coal Meas. [Sig. short-leaved.]
- cornutum*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. horned.]
- emarginatum*, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. from the peculiar notch at the apex of the leaf.]
- erosum*, Lindley & Hutton, 1833, Foss. Flora, Coal Meas. [Sig. gnawed, bitten away.]
- filiculme*, Lesquereux, 1858, Geo. Rep. Penn., vol. 2, Coal Meas. [Ety. *filum*, a thread; *culmus*, a straw.]
- longifolium*, Germar, 1828, (Rotularia longifolia) Act. Ac. Caes. Leop. Nat. Cur., vol. 15, Coal Meas. [Sig. long-leaved.]
- oblongifolium*, Germ. & Kaulf., 1828, Act. Ac. Nat. Cur., vol. 15, Coal Meas. [Ety. from the oblong leaf.]
- saxifragifolium*, Sternberg, 1825, (Rotularia saxifragifolia) Vers. Darst. Flora der Vorwelt, Coal Meas. [Sig. leaved like *Saxifraga*.]
- schlotheimi*, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- simplicitas*, Vanuxem, 1842, Geo. Rep. N. Y., Catskill Gr. [Sig. plainness, simplicity.]
- trifoliatum*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. *tres*, three; *folium*, a leaf.]
- SPHENOPTERIS**, Brongniart, 1822, Mem. du Mus. d'Hist. Nat. de Paris. [Ety. *sphen*, a wedge; *pteria*, a fern.]
- abbreviata*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. shortened.]
- acuta*, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. sharp.]
- adiantoides*, Lindley & Hutton, 1833, Foss. Flora, Coal Meas. [Sig. like *Adiantum*.]
- alata*, see *Hymenophyllites alatus*.
- artemisiaefolia*, see *Eremopteris artemisiaefolia*.
- canadensis*, Dawson, 1863, Can. Nat. & Geol., Coal Meas. [Ety. proper name.]
- davalliana*, Göppert, 1841, Gatt. d. Foss. Pflanzen, Coal Meas. [Ety. proper name.]
- decipiens*, Lesquereux, 1860, Geo. Sur. Ark., Coal Meas. [Sig. deceiving.]
- delicatula*, see *Hymenophyllites delicatulus*.
- dilatata*, Lesquereux, 1860, Geo. Sur. Ark., Coal Meas. [Sig. spread out.]
- dubuissoni*, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- elegans*, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. elegant.]
- flagellaris*, Lesquereux, 1858, Geo. Sur. Penn., Coal Meas. [Sig. like a whip.]
- furcata*, see *Hymenophyllites furcatus*.
- gersdorfi*, see *Hymenophyllites gersdorfi*.

- glandulosa, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. glandular.]
- gracilis, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. slender.]
- gravenhorsti, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- harti, Dawson, 1862, Quar. Jour. Geol. Soc., vol. 18, Devonian. [Ety. proper name.]
- hitchcockana, Dawson, 1862, Quar. Jour. Geol. Soc., vol. 18, Devonian. [Ety. proper name.]
- hoeninghausi, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- hymenophylloides, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Ety. from the resemblance to *Hymenophyllites*.]
- intermedia, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. intermediate between *S. chaerophylloides* and *Pecopteris athyrioides*.]
- irregularis, Sternberg, 1833, Vers. Darst. Flora der Vorwelt, Coal Meas. [Sig. irregular.]
- latifolia, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. broad-leaved.]
- laticus, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. broader.]
- laxa, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. loosely arranged.] This name was preoccupied by Sternberg.
- lesquereuxi, Newberry, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. proper name.]
- macilenta, Lindley & Hutton, 1833, Foss. Flora, Coal Meas. [Sig. poor, lean.]
- marginata, Dawson, 1862, Quar. Jour. Geol. Soc., vol. 18, Devonian. [Sig. bordered.]
- microloba, Göppert, 1836, Syst. Filic. Foss., Coal Meas. [Sig. small-lobed.]
- mixta, Schimper, 1869, Traité de Paléontologie Végétale, Coal Meas. [Sig. mixed.]
- munda, Dawson, 1863, Can. Nat. & Geo., vol. 8, Coal Meas. [Sig. neat, elegant.]
- myriophylla, see *Hymenophyllites myriophyllus*.
- newberryi, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. proper name.]
- obtusiloba, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. obtuse-lobed.]
- paupercula, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. poor.]
- pilosa, Dawson, 1868, Acad. Geol., Devonian. [Sig. hairy, shaggy.]
- plicata, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. folded.]
- polyphylla, Lindley & Hutton, 1835, Foss. Flora, Coal Meas. [Sig. many-leaved.]
- recurva, Dawson, 1863, Quar. Jour. Geol. Soc., vol. 19, Devonian. [Sig. turned back.]
- rigida, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. rigid.]
- scaberrima, Lesquereux, 1828, Hist. Veg. Foss., Coal Meas. [Sig. very rough.]
- schlotheimi*, see *Hymenophyllites schlotheimi*.
- spinosa*, see *Hymenophyllites spinosus*.
- splendens, Dawson, 1871, Foss. Plants Canada, Devonian. [Sig. splendid.]
- squamosa, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. scaly.]
- tenella, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. delicate.]
- tenuifolia*, see *Hymenophyllites tenuifolius*.
- trichomanoides*, see *Hymenophyllites trichomanoides*.
- tridactylites*, see *Hymenophyllites tridactylites*.
- trifoliata, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. three-leaved.]
- SPHENOTHALLUS, Hall, 1847, Pal. N. Y., vol. 1, [Ety. *sphen*, a wedge; *thallos*, a branch or frond.]
- angustifolius, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. narrow-leaved.]
- latifolius, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. broad-leaved.]
- SPIROPHYTON, Hall, 1863, 16th Reg. Rep. [Ety. *speira*, a coil; *phyton*, a plant.]
- cauda-galli, Vanuxem, 1842, (*Fucoides cauda-galli*) Geo. Rep. N. Y., Devonian. [Sig. like the tail of a cock.]
- crassum, Hall, 1863, 16th Reg. Rep., Carb. Conglomerate. [Sig. thick.]
- typus, Hall, 1863, 16th Reg. Rep., Chemung Gr. [Ety. type of the genus.]
- velum, Vanuxem, 1842, (*Fucoides velum*) Geo. Rep. N. Y. [Ety. *velum*, a curtain.]
- SPORANGITES, Dawson, 1863, Can. Nat. and Geol., vol. 8. [Sig. seed-vessel.]
- glaber, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. smooth.]
- papillatus, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. covered with papilli.]
- STAPHYLOPTERIS, 1838, Presl, in Sternb. Vers. Darst. Flora der Vorwelt. [Ety. *staphyle*, a bunch of grapes; *pteris*, a fern.]
- asteroides, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. star-like.]
- sagittata, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. barbed like an arrow.]
- stellata, Lesquereux, 1860, Geo. Sur. Ark., vol. 2, Coal Meas. [Sig. starred.]
- wortheni, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. proper name.]
- STERNBERGIA, Artis, 1826, Antediluvian Phytology. [Ety. proper name.]
- var. angularis, Dawson, 1868, Acad. Geol., Coal Meas. [Sig. angular.]
- var. approximata, Dawson, 1868, Acad. Geol., Coal Meas. [Sig. approximate.]
- var. distans, Dawson, 1868, Acad. Geol., Coal Meas. [Sig. distant.]
- var. obscura, Dawson, 1868, Acad. Geol., Coal Meas. [Sig. obscure.]

- STIGMARIA**, Brongniart, 1822, Mem. du Mus. d'Hist. Nat. de Paris. [Ety. *stigma*, a dot or puncture.] This genus is regarded as representing the roots of *Sigillaria*.
- anabathra*, Corda, 1845, Beiträge zur Flora der Vorwelt, Coal Meas. [Sig. a ladder.]
- areolata*, Dawson, 1871, Foss. Plants Canada, Devonian. [Sig. areolate, divided into irregular squares, or small angular spaces.]
- costata*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. ribbed.]
- elliptica*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. in the form of an ellipse.]
- eveni*, see *Stigmarioides eveni*.
- exigua*, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Chemung Gr. [Sig. small.]
- ficoides*, Brongniart, 1822, Mem. du Mus. d'Hist. Nat. de Paris, Coal Meas. [Sig. like a fig.]
- ficoides var. a, b, c, d, e, f, g, h, i, k, l*, Dawson, 1868, Acad. Geol., Coal Meas.
- ficoides var. reticulata*, Göppert, 1841, Gatt. d. Foss. Pflanzen, Coal Meas. [Sig. reticulated.]
- ficoides var. stellata*, Göppert, 1841, Gatt. d. Foss. Pflanzen, Coal Meas. [Sig. starred.]
- ficoides var. undulata*, Göppert, 1841, Gatt. d. Foss. Pflanzen, Coal Meas. [Sig. wavy.]
- irregularis*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. from the irregularity of the scars.]
- minor*, Göppert, 1841, Gatt. d. Foss. Pflanzen, Coal Meas. [Sig. less.]
- minuta*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Ety. in allusion to the small size of the lower scars.]
- minutissima*, Dawson, 1871, Foss. Plants Can., Devonian. [Sig. very minute.]
- perlata*, Dawson, 1871, Foss. Plants Canada, Devonian. [Sig. very wide.]
- pusilla*, Dawson, 1863, Quar. Jour. Geo. Soc., vol. 19, Devonian. [Sig. very small.]
- radicans*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. throwing out roots.]
- umbonata*, Lesquereux, 1858, Geo. Sur. Penn., vol. 2, Coal Meas. [Sig. embossed.]
- verrucosa*, Martin, 1809, (Phytolithus verrucosus) Petrif. Derb., Coal Meas. [Sig. warty.]
- STIGMARIOIDES**, Lesquereux, 1870, Geo. Sur. Ill., vol. 4. [Ety. from its resemblance to *Stigmaria*.]
- affinis*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. contiguous.]
- eveni*, Lesquereux, 1866, (*Stigmaria eveni*) Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. proper name.]
- linearis*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. drawn out in lines.]
- rugosus*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. wrinkled.]
- selago*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. like the plant *Selago*.]
- truncatus*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. truncated, cut short.]
- tuberosus*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. tuberosose, composed of tuber-like parts.]
- villosus*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. villous, covered with short hair-like projections.]
- SYRINGODENDRON**, Sternberg, 1820, Vers. Darst. Flora der Vorwelt. [Ety. *syrix*, a pipe; *dendron*, a tree.]
- bistriatum*, Wood, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. double-striated.]
- cyclostegium*, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. circular covering.]
- cyclostigma*, Brongniart, 1828, Hist. Veg. Foss., Coal Meas. [Sig. circular puncture.]
- gracile*, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Chemung Gr. [Sig. slender.]
- pachyderma*, see *Sigillaria pachyderma*.
- pes-capreoli*, Sternb., 1828, Vers. Darst. Flora der Vorwelt, Coal Meas. [Ety. *pes*, stalk; *capreolus*, small tendril which supports it.]
- porteri*, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. proper name.]
- SYRINGOXYLON**, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18. [Ety. *syrix*, a pipe, *xylon*, wood.]
- mirabile*, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Ham. Gr. [Sig. extraordinary.]
- TÆNIOPTERIS**, Brongniart, 1828, Prodr. Hist. Veg. Foss. [Ety. *tainia*, a ribbon; *pteris*, a fern.]
- magnifolia*, Bunbury, 1847, Quar. Jour. Geo. Soc. Lond., vol. 3, Coal Meas. [Sig. large-leaved.]
- TRICHOMANITES**, Göppert, 1836, Syst. Filic. Foss. [Ety. from the plant *Trichomanes*.]
- filicula*, Dawson, 1863, Quar. Jour. Geo. Soc., vol. 19, Devonian. [Ety. *filicula*, a small fern.]
- TRIGONOCARPON**, Brongniart, 1828, Prodr. Hist. Veg. Foss. [Ety. *trigon*, a triangle; *karpos*, a fruit.]
- avellanum*, Dawson, 1863, Can. Nat. & Geo., vol. 8, Coal Meas. [Sig. a filbert.]
- bertholletiforme*, Foster, 1853, Ann. of Sci., vol. 1, Coal Meas. [Sig. like *Bertholletia*.]
- carbonarium*, King, 1856, Proc. Acad. Nat. Sci., vol. 7, Coal Meas. [Sig. pertaining to coal.]

- dawsi, Lindley & Hutton, 1837, Foss. Flora, Coal Meas. [Ety. proper name.]
- hildrethi, Dawson, syn. (?) for *Trigonocarpon triloculare*.
- hookeri, Dawson, 1861, Quar. Jour. Geol., Soc., vol. 17, Coal Meas. [Ety. proper name.]
- intermedium, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. intermediate.]
- juglans, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Low. Coal Meas. [Sig. a walnut.]
- magnum, Newberry, 1873, Ohio Pal., vol. 1, Coal Meas. [Sig. large.]
- mentzelianus, Göppert & Berger, 1848, de Fruct. et Sem., Coal Meas. [Ety. proper name.]
- minus, Dawson, 1863, Can. Nat. & Geol., vol. 8, Coal Meas. [Sig. less.]
- multicarinatum, Newberry, 1873, Ohio Pal., vol. 1, Carb. Conglomerate. [Sig. many-carinated.]
- multistriatum*, see *Carpolithes multistriatus*.
- neggerathi, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- oblongum, Lindley & Hutton, 1837, Foss. Flora, vol. 3, Coal Meas. [Sig. oblong.]
- oliviforme, Lindley & Hutton, 1837, Foss. Flora, vol. 3, Coal Meas. [Sig. like an olive.]
- ornatum, Newberry, 1873, Ohio Pal., vol. 1, Carb. Conglomerate. [Sig. ornate, adorned.]
- parkinsoni, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Ety. proper name.]
- perantiquum, Dawson, 1871, Foss. Plants Canada, Devonian. [Sig. very ancient.]
- racemosum, Dawson, 1862, Quar. Jour. Geo. Soc., vol. 18, Devonian. [Sig. clustering.]
- rostellatum, Lesquereux, 1866, Geo. Sur. Ill., vol. 2, Up. Coal Meas. [Sig. little-beaked.]
- rotundum, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Sig. wheel-shaped.]
- schultzanum, Göppert & Berger, 1848, de Fruct., etc., Coal Meas. [Ety. proper name.]
- sigillarie, Dawson, 1863, Can. Nat., vol. 8, Coal Meas. [Ety. from the genus *Sigillaria*.]
- tricuspidatum, Newberry, 1873, Ohio Pal., vol. 1, Coal Meas. [Sig. three-pointed.]
- triloculare, Hildreth, 1835, (*Carpolithes trilocularis*) Am. Jour. Sci., vol. 31, Conglomerate and Low. Coal Meas. [Sig. three-chambered.]
- woodruffi, Moss, 1852, Proc. Acad. Nat. Sci., vol. 5, Coal Meas. [Ety. proper name.]
- TROCHOPHYLLUM**, Wood, 1860, Proc. Acad. Nat. Sci. This name was proposed as a substitute for *Annularia*, Sternb., because the latter was preoccupied as a generic name in the sub-kingdom Mollusca. [Ety. *trochos*, a wheel; *phyllon*, a leaf.]
- ULODENDRON**, Lindley & Hutton, 1831, Foss. Flora. [Ety. *ule*, wood; *dendron*, a tree.]
- ellipticum, Sternberg, 1838, Vers. Darst. Flora der Vorwelt, Coal Meas. [Sig. elliptical.]
- elongatum, Lesquereux, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. drawn out.]
- lindleyanum, Presl, 1833, in Sternberg, Vers. Darst. Flora der Vorwelt, Coal Meas. [Ety. proper name.]
- majum, Lindley & Hutton, 1831-33, Foss. Flora, Coal Meas. [Sig. great.]
- minus, Lindley & Hutton, 1833, Foss. Flora, Coal Meas. [Sig. less.]
- punctatum, Presl, 1833, in Sternberg, Vers. Flora der Vorwelt, Coal Meas. [Sig. dotted.]
- UPHANTENIA**, Vanuxem, 1843, Geo. Rep. N. Y. [Ety. *uphantos*, woven; *tainia*, ribbon.]
- chemungensis, Vanuxem, 1843, Geo. Rep. N. Y., Chemung Gr. [Ety. proper name.]
- WALCHIA**, Sternberg, 1825, Vers. Darst. Flora der Vorwelt. [Ety. proper name.]
- gracilis, Dawson, Coal Meas. [Sig. slender.]
- robusta, Dawson, Coal Meas. [Sig. robust.]
- WHITTLESEYA**, Newberry, 1853, Ann. of Sci., vol. 1. [Ety. proper name.]
- elegans, Newberry, 1853, Ann. of Sci., vol. 1, Cuyahoga shale. [Sig. elegant.]
- ZAMITES**, Brongniart, 1825, in Annales des Sciences Naturelles, vol. 4. [Ety. from its resemblance to the existing genus *Zamia*.]
- gramineus, Bunbury, 1847, Quar. Jour. Geo. Soc. Lond., vol. 3, Coal Meas. [Sig. grassy.]
- obtusifolius, Rogers, 1844, Rep. Ass'n Am. Geol., Coal Meas. [Sig. obtuse leaved.]

# ANIMAL KINGDOM.

## SUB-KINGDOM PROTISTA.

CLASS RHIZOPODA.—[Ety. *rhiza*, a root; *podes*, feet.]

CLASS PORIFERA.—[Ety. *porus*, a pore; *fero*, to bear.]

CLASS RHIZOPODA.—Dentalina, Eozoon, Fusulina, Nullipora, Receptaculites, Rotalia.

CLASS PORIFERA.—Archeocyathus, Astræospongia, Astylospongia, Aulocopina, Brachiospongia, Calathium, Cnemidium, Conopterium, Eospongia, Palæacis, Palæomanon, Rhabdaria, Trachyum, Trichospongia.

INCERTÆ SEDIS.—Pasceolus, Ribeiria. The latter genus is placed by Woodward in the class Lamellibranchiata. Salter referred it to the Crustacea. It is very doubtful whether it is American.

ARCHEOCYATHUS, Billings, 1861, Pal. Foss., vol. 1, Potsdam Gr. [Ety. *arche*, beginning; *cyathus*, a cup.]

atlanticus, Billings, 1861, Pal. Foss., vol. 1, Potsdam Gr. [Ety. mythological name.]

minganensis, Billings, 1859, (Petraia minganensis) Can. Nat. & Geol., vol. 4, Calif. Gr. [Ety. proper name.]

profundus, Billings, 1861, Pal. Foss., vol. 1, Potsdam Gr. [Sig. deep.]

rensselaerius, Ford, 1873, Am. Jour. Sci. & Arts, 3rd ser., vol. 5, Low. Potsdam Gr. [Ety. proper name.]

ASTRÆOSPONGIA, Roemer, 1860, Sil. Fauna des West Tenn. [Ety. *astræa*, from *aster*, a star; *spongia*, sponge.]

hamiltonensis, Meek & Worthen, 1866, Proc. Chi. Acad. Sci., vol. 1, Ham. Gr. [Ety. proper name.]

meniscus, Roemer, 1848, (Blumenbachium miniscus) Leonh. & Bronn's Jahrb., Niagara Gr. [Ety. *meniskos*, a little moon.]

ASTYLOSPONGIA, Roemer, 1860, Sil. Fauna des West Tenn. [Ety. *astylos*, without a pillar or prop; *spongia*, sponge.]

christiana, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Niagara Gr. [Ety. proper name.]

imbricato-articulata, Roemer, 1848, (Siphonia imbricato-articulata) Leonh. & Bronn's Jahrb., Niagara Gr. [Ety. *imbricatus*, imbricated; *articulatus*, articulated.]

inciso-lobata, Roemer, 1848, (Spongia inciso-lobata) Leonh. & Bronn's Jahrb., Up. Sil. [Sig. cut into lobes.]

bursa, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. a purse.]

parvula, Billings, 1861, Pal. Foss., vol. 1, Trenton Gr. [Sig. small.]

perryi, Billings, 1861, Geol. Vermont, Black Riv. Gr. [Ety. proper name.]

præmorsa, Goldfuss, 1826, (Siphonia præmorsa) Petref. Germ., Niagara Gr. [Sig. jagged as if bitten off.]

stellatim-sulcata, Roemer, 1848, (Spongia stellatim-sulcata) Leonh. & Bronn's Jahrb., Up. Sil. [Sig. star-furrowed; in allusion to the star-like depressions on the outer surface.]

AULOCOPINA, Billings, 1875, Can. Nat. & Geol. [Ety. *aulokopeo*, cut into pipes.]

granti, Billings, 1875, Can. Nat. & Geol., Niagara Gr. [Ety. proper name.]

*Blumenbachium*, König, 1820, Icones, fossiles, sectiles,

*meniscus*, see Astræospongia meniscus.

BRACHIOSPONGIA, Marsh, 1867, Am. Jour. Sci. & Arts, 2nd series, vol. 44. [Ety. *brachium*, an arm; *spongia*, sponge.]

digitata, Owen, 1857, (Scyphia digitata) Geo. of Ky., vol. 2, Cin'ti Gr. [Sig. having fingers or toes.]

roemerana, Marsh, 1867, Am. Jour. Sci. and Arts, 2nd series, vol. 44, Cin'ti Gr. [Ety. proper name.]

lyoni, Marsh, 1867, Am. Jour. Sci. & Arts, 2nd series, vol. 44, Cin'ti Gr. [Ety. proper name.]

- CALATHIUM**, Billings, 1865, Pal. Foss., vol. 1. [Ety. *kalathos*, a small wicker basket.]  
affine, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. contiguous.]  
anstedii, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
canadense, Billings, 1865, Pal. Foss., vol. 1, Chazy Gr. [Ety. proper name.]  
fittoni, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
formosum, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. beautiful.]  
pannosum, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. ragged.]  
paradoxicum, Billings, 1865, Pal. Foss., vol. 1, Calcif. Gr. [Sig. puzzling, questionable.]
- CNEMIDIUM**, Goldfuss, 1826, Petref. Germ. [Ety. *knemidos*, armor for the legs, a sort of boot.]  
trentonensis, Worthen, 1875, Geo. Sur. Ill., vol. 6, Trenton Gr. [Ety. proper name.]
- CONOPTERIUM**, Winchell, 1865, Proc. Acad. Nat. Sci. [Ety. *konos*, a cone; *poterion*, a cup.]  
effusum, Winchell, 1865, Proc. Acad. Nat. Sci., Lithographic limestone. [Sig. spread abroad.]  
*Coscinopora sulcata*, see *Receptaculites oweni*.
- DENTALINA**, D'Orbigny, 1826, Ann. Sci. Nat., vol. 7. [Ety. *dentale*, tooth; *inus*, resemblance.]  
priscilla, Dawson, 1868, Acad. Geol., Carb. [Ety. proper name.]
- EOSPONGIA**, Billings, 1861, Pal. Foss., vol. 1. [Ety. *eos*, dawn; *spongia*, sponge.]  
roemeri, Billings, 1861, Pal. Foss., vol. 1, Chazy Gr. [Ety. proper name.]  
varians, Billings, 1861, Pal. Foss., vol. 1, Chazy Gr. [Ety. *varians*, variable.]
- Eozoon**, Dawson, 1865, Can. Nat. & Geo., 2d series, vol. 2. [Ety. *eos*, dawn; *zoon*, animal.]  
canadense, Dawson, 1865, Can. Nat. & Geo., 2d series, vol. 2, Laurentian Gr. [Ety. proper name.]
- FUSULINA**, Fischer, 1837, Oryct. du Gouv. de Moscou. [Ety. *fusus*, a spindle; *inus*, little.]  
cylindrica, Fischer, 1837, Oryct. du Gouv. de Moscou., Coal Meas. [Sig. cylindrical.]  
cylindrica var. *ventricosa*, Meek & Hayden, 1859, Proc. Acad. Nat. Sci., vol. 10, Coal Meas. [Sig. *ventricose*.]  
elongata, Shumard, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. elongated.]  
gracilis, Meek, 1864, Pal. of California, vol. 1, pt. 4, Coal Meas. [Sig. slender.]  
robusta, Meek, 1864, Pal. California, vol. 1, Coal Meas. [Sig. robust.]  
ventricosa, Meek & Hayden, 1864, Pal. Upper Mo., Coal Meas. See *F. cylindrica* var. *ventricosa*.]  
*Ischadites tessellatus*, Winchell & Marcy, Syn. for *Receptaculites infundibulus*.
- Lunulites*, (?) *dactioloïdes*, see *Receptaculites dactioloïdes*.
- NULLIPORA**, Lamarck, 1801, Systeme des Animaux sans Vertebres. [Ety. *nullus*, no; *porus*, pore.]  
(?) *obtexta*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. woven over.]
- Orbitulites*, (?) *reticulata*, see *Receptaculites reticulatus*.
- PALÆACIS**, Haime, 1860, Hist. Nat. des Coralliaires. [Ety. *palaïos*, ancient; *akis*, a barb.]  
compressus, Meek & Worthen, 1866, (Sphenopoterium compressum) Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. flattened.]  
cuneatus, Meek & Worthen, 1860, (Sphenopoterium cuneatum) Proc. Acad. Nat. Sci. Phil., St. Louis Gr. [Sig. wedge-shaped.]  
enormis, Meek & Worthen, 1866, (Sphenopoterium enorme) Geo. Sur. Ill., vol. 2, Kinderhook Gr. [Sig. very large.]  
enormis var. *depressus*, Meek & Worthen, 1866, (Sphenopoterium enorme var. *depressum*) Geo. Sur. Ill., vol. 2, Kinderhook Gr. [Sig. depressed.]  
obtusum, Meek & Worthen, 1860, (Sphenopoterium obtusum) Proc. Acad. Nat. Sci., Keokuk Gr. [Sig. obtuse.]
- PALÆOMANON**, Roemer, 1860, Sil. Fauna. West Tenn. [Ety. *palaïos*, ancient; *Manon*, a recent genus of sponges.]  
cratera, Roemer, 1848, (Siphonia cratera) Leonh. und Bronn's Jahrb., Up. Sil. [Sig. a cup or goblet.]
- PASCEOLUS**, Billings, 1857, Rep. of Progr. [Ety. *pasceolus*, a leather money bag.]  
claudii, S. A. Miller, 1874, Cin. Quar. Jour. Sci., Cin. Gr. [Ety. proper name.]  
darwini, S. A. Miller, 1874, Cin. Quar. Jour. Sci., Cin. Gr. [Ety. proper name.]  
globosus, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. globular.]  
gregarius, Billings, 1866, Catal. Sil. Foss., Antic., Anticosti Gr. [Sig. found in flocks.]  
halli, Billings, 1857, Rep. of Progr., Anticosti Gr. [Ety. proper name.]  
intermedius, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. intermediate.]
- RECEPTACULITES**, DeFrance, 1827, Dict. Sci. Nat. vol. 45. [Ety. *receptaculum*, a receptacle; *lithos*, stone.]  
calceiferus, Billings, 1865, Pal. Foss., vol. 1, Calcif. Gr. [Ety. from the Calceiferous Group.]  
canadensis, Billings, 1863, (Ischadites canadensis) Geo. of Canada, Anticosti Gr. [Ety. proper name.]  
dactioloïdes, Owen, 1840, (Lunulites dactioloïdes) Rep. on Min. Lands. Up. Sil. [Ety. from the thimble-like punctures. The correct orthography is *dactyloïdes*.]



- elegantulus*, Billings, 1865, Pal. Foss., vol. 1, Calcif. Gr. [Sig. elegant.]
- formosus*, Meek & Worthen, 1870, Proc. Acad. Nat. Sci., Niagara Gr. [Sig. beautiful.]
- fungosus*, Hall, 1861, Geo. Rep. Wfs., Galena Gr. [Sig. spongy.]
- globularis*, Hall, 1861, Supp. Geo. Rep. Wis., Galena Gr. [Sig. globular.]
- hemisphericus*, Hall, 1861, Geo. Rep. Wis., Niagara Gr. [Sig. hemispherical.]
- infundibulus*, Hall, 1861, Geo. Rep. Wis., Niagara Gr. [Sig. a funnel.]
- insularis*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. upon an island.]
- iowensis*, Owen, 1852, (*Selenoides iowensis*) Geo. Rep. Wis., Iowa and Minn. [Ety. proper name.]
- jonesi*, Billings, 1865, Pal. Foss., vol. 1, Low. Held. Gr. [Ety. proper name.]
- neptuni*, De France, 1827, Dict. des Sci. Nat., vol. 45, Trenton Gr. [Ety. proper name.]
- occidentalis*, Salter, 1859, Can. Org. Rem. Decade 1, Trenton Gr. [Sig. Western.]
- ohioensis*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Ety. proper name.]
- oweni*, Hall, 1861, Geo. Rep. Wis., Galena Gr. [Ety. proper name.]
- reticulatus*, Owen, 1840, (*Orbituloides reticulata*) Rep. on Min. lands, Niagara Gr. [Sig. reticulated.]
- subturbatus*, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. somewhat top-shaped.]
- sulcatus*, Owen, 1844. This name was pre-occupied and the species is now named *R. oweni*.
- RHABDARIA**, Billings, 1865, Pal. Foss., vol. 1. [Ety. *rhabdos*, a rod.]
- fragilis*, Billings, 1865, Pal. Foss., vol. 1, Calcif. Gr. [Sig. frail, brittle.]
- furcata*, Billings, 1865, Pal. Foss., vol. 1, Calcif. Gr. [Sig. forked.]
- RIBEIRIA**, Sharpe, 1853, Jour. Geo. Soc., vol. 9. [Ety. proper name (?).]
- (?) *calcifera*, Billings, 1865, Pal. Foss., vol. 1, Calcif. Gr. [Ety. from the Calciferous Group.]
- (?) *longiuscula*, Billings, 1865, Pal. Foss., vol. 1, Calcif. Gr. [Sig. somewhat the longest.]
- ROTALIA**, Lamarck, 1804, Ann. Mus. [Ety. *rota*, a wheel.]
- baileyi*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]
- Scyphia*, Oken, 1815, Lehrs. Naturg. *digitata*, see *Brachiospongia digitata*.
- stellata*, Troost, 1840. Not clearly defined.
- Selenoides*, Owen, 1852. Syn. for *Receptaculites*.
- iowensis*, Owen, 1852, see *Receptaculites iowensis*.
- Siphonia*, Parkinson, 1820, Organ. Rem. *cratera*, see *Palæomanon cratera*.
- imbricato-articulata*, see *Astylospongia imbricato-articulata*.
- præmorsa*, see *Astylospongia præmorsa*.
- Sphenopoterium*, Meek & Worthen, 1866. A Syn. for *Palæacis*.
- compressum*, see *Palæacis compressus*.
- cuneatum*, see *Palæacis cuneatus*.
- enorme*, see *Palæacis enormis*.
- enorme* var. *depressus*, see *Palæacis enormis* var. *depressus*.
- obtusum*, see *Palæacis obtusum*.
- Spongia*, Linnæus, 1759, Systema Naturæ.
- inciso-lobata*, see *Astylospongia inciso-lobata*.
- stellatim-sulcata*, see *Astylospongia stellatim-sulcata*.
- TRACHYUM**, Billings, 1865, Pal. Foss., vol. 1. [Ety. *trachus*, rough, rugged.]
- cyathiforme*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. cup-shaped.]
- rugosum*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. wrinkled.]
- TRICHOSPONGIA**, Billings, 1865, Pal. Foss., vol. 1. [Ety. *trichias*, to show hairs; *spongia*, a sponge.]
- sericea*, Billings, 1865, Pal. Foss., vol. 1, Calciferous Gr. [Sig. silky.]

# SUB-KINGDOM RADIATA.

---

## CLASS POLYPI.

---

### ORDER ZOANTHARIA.

---

FAMILY ASTRÆIDÆ.—*Astræa*, *Sarcinula*.

FAMILY CYATHOPHYLLIDÆ.—*Acervularia*, *Acrophyllum*, *Amplexus*, *Anthophyllum*, *Aulophyllum*, *Axophyllum*, *Baryphyllum*, *Blotrophyllum*, *Campophyllum*, *Chonophyllum*, *Clisiophyllum*, *Combophyllum*, *Cyathophyllum*, *Cyclolites*, (?) *Cystiphyllum*, *Diphyphyllum*, *Duncanella*, *Eridophyllum*, *Ethmophyllum*, *Hadrophyllum*, *Heliophyllum*, *Heterophrentis*, *Lithostrotion*, *Lonsdaleia*, *Lophophyllum*, *Microcylus*, *Omphyma*, *Pachyphyllum*, *Palaeocylus*, *Palaeophyllum*, *Petraia*, *Phillipsastrea*, *Ptycophyllum*, *Smithia*, *Streptelasma*, *Strombodes*, *Vesicularia*, *Zaphrentis*.

FAMILY CYATHAXONIDÆ.—*Cyathaxonia*.

FAMILY FAVOSITIDÆ.—*Alveolites*, *Astrocerium*, *Bolboporites*, *Chetetes*, *Cladopora*, *Columnaria*, *Columnopora*, *Dendropora*, *Emmonsia*, *Faviphyllum*, *Favistella*, *Favosites*, *Leptopora*, *Limaria*, *Lunatipora*, *Michelinia*, *Monticulipora*, *Nebulipora*, *Sphaerolites*, *Stellipora*, *Stenopora*, *Striatopora*, *Tetradium*, *Thecia*, *Trachypora*, *Vermipora*.

FAMILY HALYSITIDÆ.—*Calapœcia*, *Haimeophyllum*, *Halysites*, *Syringopora*.

FAMILY MILLEPORIDÆ.—*Fistulipora*, *Heliolites*, *Lyellia*, *Plasmopora*, *Rhombopora*, *Thecostegites*.

FAMILY PORITIDÆ.—*Pleurodictyum*, *Protarea*.

### ORDER ALCYONARIA.

FAMILY ALCYONIDÆ.—*Aulopora*, *Heliopora*, *Quenstedtia*.

FAMILY TUBIPORIDÆ.—*Cannopora*, *Caunopora*, *Dictyostroma*, *Lamellopore*, *Stromatocerium*, *Stromatopora*, *Syringostroma*, *Tubipora*.

FAMILY GRAPTOLITIDÆ.—*Buthograptus*, *Callograptus*, *Chonograptus*, *Cladograptus*, *Climacograptus*, *Dawsonia*, *Dendrograptus*, *Dicranograptus*, *Dictyonema*, *Didymograptus*, *Diplograptus*, *Discophyllum*, *Graptolithus*, *Inocaulis*, *Megalograptus*, *Monograptus*, *Nemagraptus*, *Nereograptus*, *Phyllograptus*, *Plumalina*, *Ptilograptus*, *Rastrites*, *Retiograptus*, *Retiolites*, *Staurograptus*, *Tetragraptus*, *Thamnograptus*.

- ACERVULARIA, Schweigger, 1820, Handb. der Naturg. [Ety. *acervus*, a heap, considered as a body.]
- clintonensis, Nicholson, 1875, Ohio Pal., vol. 2, Clinton Gr. [Ety. proper name.]
- davidsoni, Edwards & Haime, 1851, Monograph, Corniferous & Ham. Gr. [Ety. proper name.]
- inequalis, Hall, 1873, 23rd Reg. Rep. Chemung Gr. [Sig. unequal.]
- profunda, Hall, 1858, Geo. of Iowa, Corniferous and Ham. Gr. [Sig. deep.]
- rugosa, Hall, 1843, (Astrea rugosa) Geo. Rep. 4th Dist. N. Y., Onondaga Gr. [Sig. wrinkled.] Is this Cyathophyllum rugosum?
- ACROPHYLLUM, Thomson & Nicholson, 1876, Ann. Mag. Nat. Hist., 4th series, vol. 17. [Ety. *akros*, the point or summit; *phyllon*, a leaf.]
- oneidaense, Billings, (Clisiophyllum oneidaense) Can. Jour. Corniferous Gr. [Ety. proper name.]
- Agaricia, Lamarck, 1801, Syst. des Animaux. Vert.
- swinderniana, see Thecia swinderniana.
- ALVEOLITES, Lamarck, 1801, Syst. des Animaux. Vert. [Ety. *alveus*, a cavity; *lithos*, stone.]
- billingsi, Nicholson, 1874, Geo. Mag. N. S., vol. 1, Corniferous Gr. [Ety. proper name.]
- confertus, Nicholson, 1874, Geo. Mag. N. S., vol. 1, Cornif. Gr. [Sig. thick or crammed in close together.]
- cryptodens, Billings, 1859, Can. Jour., vol. 4, Up. Held. Gr. [Sig. hidden-toothed.]
- distans, Nicholson, 1874, Geo. Mag. N. S., vol. 1, Cornif. Gr. [Ety. in allusion to the distance between the calices.]
- dubia, see Favosites dubius.
- exsul, Hall, 1876, 28th Reg. Rep. Niagara Gr. [Sig. a wanderer.]
- fisheri, Billings, 1859, Can. Jour. Up. Held. Gr. [Ety. proper name.]
- frondosus, Nicholson, 1874, Geo. Mag. N. S., vol. 1, Ham. Gr. [Sig. full of branches.]
- goldfussi, Billings, 1859, Can. Jour. Ham. Gr. [Ety. proper name.]
- granulosus, James, 1875, Catal. Cin. Foss., Cincinnati Gr. [Sig. full of granules.]
- labechi, Edwards & Haime, 1851, Pal. Foss. des Terr., Palæoz., Anticosti Gr. [Ety. proper name.]
- labiosus, Billings, 1859, Can. Jour., Corniferous Gr. [Sig. large-lipped.]
- megastoma, Winchell, 1866, Rep. Low. Peninsula, Mich., Ham. Gr. [Sig. large-mouthed; from the large oblique cell mouths.]
- niagarensis, Rominger, 1876, Foss. Corals, Niagara Gr. [Ety. proper name.]
- ramulosus, Nicholson, 1874, Geo. Mag. Corniferous Gr. [Sig. full of little sprigs.]
- repens, Fought, 1749, (Millepora repens) Amæn. Acad., vol. 1, Niagara Gr. [Sig. creeping.]
- reticulata, see Favosites reticulatus.
- rockfordensis, Hall, 1873, Chemung Gr., 26th Reg. Rep. [Ety. proper name.]
- roemeri, Billings, 1859, Can. Jour., Ham. Gr. [Ety. proper name.]
- selwyni, Nicholson, 1874, Geo. Mag. N. S., vol. 1, Corniferous Gr. [Ety. proper name.]
- squamosus, Billings, 1859, Can. Jour., Corniferous Gr. [Sig. scaly, rough.]
- strigillatus, Winchell, 1866, Rep. Low. Peninsula, Mich., Ham. Gr. [Sig. wide-furrowed.]
- subramosus, Rominger, 1876, Foss. Corals, Ham. Gr. [Sig. somewhat ramose.]
- vallorum, Meek, 1868, Trans. Chi. Acad. Sci., Devonian. [Sig. intrenched.]
- AMPLEXUS, Sowerby, 1812, Mineral Conchology, vol. 1. [Ety. *amplexus*, encircling, surrounding.]
- cingulatus, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Sig. banded, from the sharp-edged rings of growth.]
- coralloides, Sowerby, 1812, Min. Conch., vol. 1, Warsaw Gr. [Sig. like a coral.]
- exilis, Billings, 1875, Can. Nat. & Geol. Corniferous Gr. [Sig. small.]
- fragilis, White & St. John, 1868, Trans. Chi. Acad. Sci., Keokuk Gr. [Sig. frail.]
- mirabilis, Billings, 1875, Can. Nat. & Geol., Coal Meas. [Sig. wonderful.]
- shumardi, M. Edwards, 1851, (Cyathophyllum shumardi) Mon. des Polyp. Foss., Niagara Gr. [Ety. proper name.]
- yandelli, Edwards & Haime, 1851, Pal. Foss. des Ter. Palæoz., Devonian. [Ety. proper name.]
- zaphrentiformis, White, 1876, Geo. Uinta Mountains, Low. Aubrey Gr. [Sig. in form like the genus *Zaphrentis*.]
- ANTHOPHYLLUM, Schweigger, 1820, Handb. der Naturg. [Ety. *anthos*, a flower; *phyllon*, a leaf.]
- denticulatum, Goldfuss, 1826, Petref. Germ., Niagara Gr. [Sig. denticulated.]
- expansum, Owen, 1840, Rep. on Mineral Lands, Devonian. [Sig. spread out.]
- Astrea, Lamarck, 1815, Histoire Naturelle des Animaux sans Vertebres.
- gigas, see Phillipsastrea gigas.
- helianthoides, as identified by D'Archiac & Verneuil, see Heliophyllum Halli.
- mammillaris, Fischer as identified by Castlenau, Syn. for Lithostrotion canadense.
- mammillaris, see Phillipsastrea mammillaris.
- rugosa, see Acervularia rugosa.
- tessellata, Troost, 1840, 5th Geo. Rep. Tenn., Low. Carb. Not satisfactorily defined.

- ASTROCIERIUM**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *aster*, a star; *kerion*, honey-comb.] This genus is generally considered a synonym for *Favosites* and hence I have placed the species under that head also.
- constrictum, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. constricted.]
- parasiticum, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. parasitic.]
- pyriforme, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. pear-shaped.]
- venustum, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. elegant.]
- AULOPHYLLUM**, Edwards & Haime, 1850, Brit. Pal. Foss. [Ety. *aulos*, a pipe; *phyllon*, a plant.]
- richardsoni, Meek, 1868, Trans. Chi. Acad. Sci., Devonian. [Ety. proper name.]
- AULOPORA**, Goldfuss, 1826, Germ. Petref. [Ety. *aulos*, a pipe; *poros*, a pore.]
- aperta, Winchell, 1866, Rep. Low. Peninsula, Mich., Ham. Gr. [Sig. open, wide.]
- arachnoidea, Hall, 1847, Pal. N. Y. vol. 1, Trenton & Hud. Riv. Gr. [Sig. in the form of a cob-web.]
- conferta, Winchell, 1866, Rep. Low. Peninsula, Mich., Ham. Gr. [Sig. thick or crammed in close together.]
- cornuta, see *Quenstedtia cornuta*.
- cyclopora, Winchell, 1866, Rep. Low. Peninsula, Mich., Ham. Gr. [Ety. *kuklos*, a circle; *poros*, a pore.]
- erecta, Rominger, 1876, Foss. Corals, Ham. Gr. [Sig. erect.]
- filiformis, Billings, 1859, Can. Jour., vol. 4, Corniferous Gr. [Sig. thread-like.]
- iowensis, Hall, 1873, 23rd Reg. Rep., Chemung Gr. [Ety. proper name.]
- precious, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. a kind of grapevine.]
- repens, Walch et Knorr, 1775, (Milleporites repens) Sammlung von Merk., Niagara Gr. [Sig. creeping.]
- saxivadum, Hall, 1873, 23rd Reg. Rep., Chemung Gr. [Sig. stone-bottomed.]
- schohariae, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Ety. proper name.]
- serpens, Goldfuss, 1826, Germ. Petref., Hamilton Gr. [Sig. crawling.]
- serpuloidea, Winchell, 1866, Rep. Low. Peninsula, Mich., Ham. Gr. [Sig. worm-formed.]
- tubæformis, Goldfuss, 1826, Germ. Petref. Lonsdale, 1839, Murch. Sil. Syst., Ham. Gr. [Sig. trumpet formed.]
- umbellifera*, see *Quenstedtia umbellifera*.
- Axinura*, Castelnau, syn. for *Lithostrotion canadense*, see *Lithostrotion canadense*.
- AXOPHYLLUM**, Edwards & Haime, 1850, Brit. Pal. Foss. [Ety. *axon*, axis; *phyllon*, a plant.]
- infundibulum, Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Sig. a funnel.]
- rudis, White & St. John, 1868, Trans. Chi. Acad. Sci., Coal Meas. [Sig. rude, rustic.]
- BARYPHYLLUM**, Edwards & Haime, 1850, Brit. Foss. Corals. [Ety. *barys*, heavy; *phyllon*, a plant.]
- arenarium, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Onondaga Gr. [Sig. sandy.]
- BLOTHOPHYLLUM**, Billings, 1859, Can. Jour., vol. 4. [Ety. *blothros*, tall-growing; *phyllon*, a plant.]
- approximatum, Nicholson, 1875, Can. Nat. & Geol., Corniferous Gr. [Sig. approximate.]
- cæspitosum, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. turf.]
- decoratum, Billings, 1859, Can. Jour., vol. 4, Corniferous Gr. [Sig. peeled, barked.]
- BOLBOPORITES**, Billings, 1859, Can. Nat. & Geol., vol. 4. [Ety. *bolbos*, a bulb; *poros*, a pore.]
- americanus, Billings, 1859, Can. Nat. & Geo., vol. 4, Chazy Gr. [Ety. proper name.]
- BUTHOGRAPTUS**, Hall, 1861, Geo. Rep. Wis. [Ety. *buthos*, in the deep; *grapho*, to write.]
- laxus, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Sig. loose.]
- Calamopora*, Goldfuss, syn. for *Favosites*.
- basaltica*, see *Favosites basalticus*.
- cristata*, see *Favosites cristatus*.
- cumberlandica*, see *Favosites cumberlandicus*.
- favosa*, see *Favosites favosus*.
- fibrosa*, see *Monticulipora fibrosa*.
- forbesi* var. *discoidea*, see *Favosites forbesi* var. *discoideus*.
- gothlandica*, see *Favosites gothlandicus*.
- heliolitiformis*, see *Favosites heliolitiformis*.
- hemispherica*, see *Favosites hemisphericus*.
- infundibuliformis*, Goldfuss, as identified by D'Archiac & Verneuil.
- mackrothi*, Geinitz, see *Chetetes mackrothi*.
- maxima*, see *Favosites maximus*.
- tumida*, see *Chetetes tumidus*.
- winchelli*, see *Favosites winchelli*.
- CALAPECEIA**, Billings, 1865, Can. Nat. & Geo., 2d ser., vol. 2, Mid. Sil. [Ety. *kalos*, beautiful; *poikilos*, spotted.]
- anticostiensis, Billings, 1865, Can. Nat. & Geo., 2d series, vol. 2, Mid. Sil. [Ety. proper name.]
- canadensis, Billings, 1865, Can. Nat. & Geo., 2d series, vol. 2, Black Riv. Gr. [Ety. proper name.]
- huronensis, Billings, 1865, Can. Nat. & Geo., 2d series, vol. 2, Hud. Riv. Gr. [Ety. proper name.]
- CALLOGRAPTUS**, Hall, 1865, Can. Org. Rem., Decade 2. [Ety. *kallos*, beautiful; *grapho*, to write.]
- (?) *diffusus*, see *Dendrograptus diffusus*.
- elegans*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Sig. elegant.]
- salteri*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Ety. proper name.]

**CAMPOPHYLLUM**, Edwards & Haime, 1850, British Foss. Corals. [Ety. *kamos*, a sea animal; *phyllon*, a plant.]  
*nanum*, Hall, 1873, 23d Reg. Rep. Chemung Gr. [Sig. dwarfish.]  
*texanum*, Shumard, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]  
*torquium*, Owen, 1852, (Cyathophyllum torquium) Geo. Rep. Wis., Iowa and Minn., Coal Meas. [Sig. twisted.]  
*Caninia*, Syn. for Zaphrentis.  
*bilateralis*, see Zaphrentis *bilateralis*.  
**CANNAPORA**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *kanna*, reed; *poros*, pore.]  
*junciformis*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. like rush stems in form.]  
*Catenipora*, Lamarck, 1816, Anim. sans. Vert. Syn. for Halysites.  
**CAUNOPORA**, Phillips, 1841, Palaeozoic fossils of Cornwall, Devon and West Somerset. [Ety. *kaunos*, loose; *poros*, perforation.]  
*planulata*, Hall, 1873, 23rd Reg. Rep., Chemung Gr. [Sig. somewhat flat.]  
**CHETETES**, Fisher, 1837, Oryct. du Gouv. Moscou. [Ety. *chaite*, hair.]  
*approximatus*, see Monticulipora *approximata*.  
*attritus*, see Monticulipora *attrita*.  
*barrandi*, see Monticulipora *barrandi*.  
*briareus*, see Monticulipora *briareus*.  
*calicula*, see Monticulipora *calicula*.  
*carbonarius*, Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Sig. pertaining to coal.]  
*cincinnatiensis*, see Monticulipora *cincinnatiensis*.  
*clathratulus*, syn. for Cyclopora *jamesi*.  
*clavacoideus*, see Monticulipora *clavacoides*.  
*columnaris*, see Tetradium *columnare*.  
*consimilis*, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. similar in all parts.]  
*corticans*, syn. for Monticulipora *tuberculata*.  
*dalei*, see Monticulipora *dalii*.  
*decipiens*, see Monticulipora *decipiens*.  
*delicatulus*, see Monticulipora *delicatula*.  
*discoideus*, see Monticulipora *discoidea*.  
*fibrosus*, see Monticulipora *fibrosa*.  
*fletcheri*, see Monticulipora *fletcheri*.  
*frondosus*, see Monticulipora *frondosa*.  
*gracilis*, see Monticulipora *gracilis*.  
*hamiltonensis*, Winchell, 1866, Rep. Low. Pen. Mich., Ham. Gr. [Ety. proper name.]  
*helderbergiae*, Hall, 1874, 26th Reg. Rep. Low., Held. Gr. [Ety. proper name.]  
*jamesi*, see Monticulipora *jamesi*.  
*lycoperdon*, see Monticulipora *lycoperdon*.  
*mackrothi*, Geinitz, 1846, (Calamopora mackrothi) Grund., p. 586, Permian Gr. [Ety. proper name.]  
*mammulatus*, see Monticulipora *mammulata*.

*milleporaceus*, Troost. Where?  
*microscopica*, Winchell, 1866, Rep. Low. Pen. Mich., Ham. Gr. [Ety. *mikros*, small; *skoepo*, to view—from the small branches.]  
*moniliformis*, Nicholson, 1874, Geo. Mag. N. S., vol. 1, Ham. Gr. [Sig. bead-like.]  
*muscatinensis*, White 1876, Proc. Acad. Nat. Sci., Devonian. [Ety. proper name.]  
*newberryi*, see Monticulipora *newberryi*.  
*nodulosus*, see Monticulipora *nodulosa*.  
*onealli*, see Monticulipora *onealli*.  
*ortoni*, see Monticulipora *ortoni*.  
*papillatus*, see Monticulipora *papillata*.  
*pavonia*, see Monticulipora *pavonia*.  
*petechialis*, see Monticulipora *petechialis*.  
*petropolitanus*, Pander. It is not evident that this species is found in America.  
*pulchellus*, Edwards & Haime, as identified by Nicholson, but I think it is not found in this country.  
*quadrangularis*, Nicholson, 1874, Geo. Mag. N. S., vol. 1, Ham. Gr. [Sig. four cornered; quadrangular.]  
*quadratus*, see Monticulipora *quadrata*.  
*rhombicus*, Nicholson, 1875, syn. for Monticulipora *quadrata*.  
*rugosus*, Hall, see Monticulipora *rugosa*.  
*rugosus*, Edwards & Haime, 1851. This name was preoccupied. Moreover it is merely a form of Monticulipora *dalii*.  
*sigillarioides*, see Monticulipora *sigillarioidea*.  
*sphaericus*, Hall, 1874, 26th Reg. Rep. Low. Held. Gr. [Sig. spherical.]  
*subpulchellus*, see Monticulipora *subpulchella*.  
*tuberculatus*, see Monticulipora *tuberculata*.  
*tumidus*, Phillips, 1836, (Calamopora tumida) Geol. Yorkshire, Low. Carboniferous. [Ety. *tumidus*, swollen.]  
**CHONOGRAFTUS**, Hall, 1873, Ann. Mag. Nat. Hist., 4th series, vol. 13. [Ety. *konos*, a twig; *grapho*, to write.] This subgenus is proposed to include the two species, Graptolithus *flexilis* and *G. rigidus*.  
**CHONOPHYLLUM**, Edwards & Haime, 1850, Brit. Foss. Corals. [Ety. *konos*, a cone; *phyllon*, a plant.]  
*belli*, Billings, 1865, Can. Nat. & Geo., vol. 2, Clinton Gr. [Ety. proper name.]  
*ellipticum*, Hall, 1873, 23d Reg. Rep. Chemung Gr. [Sig. in the form of an ellipse.]  
*magnificum*, Billings, 1859, Can. Jour. Corniferous Gr. [Sig. magnificent.]  
*niagarensis*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Ety. proper name.]  
*ponderosum*, Rominger, 1876, Foss. Corals Ham. Gr. [Sig. bulky, heavy.]  
*Chonostegites clappi*, see Michelinia *clappi*.

- CLADOGRAPTUS**, Geinitz, 1852, (*Cladograp-sus*) Verst. Grauw. Sachs., etc. [Ety. *klados*, a twig; *grapho*, to write.]  
*dissimularis*, Emmons, 1856, Am. Geol., Quebec Gr. [Sig. dissimilar.]  
*inequalis*, Emmons, 1856, Am. Geol., Quebec Gr. [Sig. unequal.]
- CLADOPORA**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *klados*, a twig; *poros*, a pore.]  
*alpenensis*, Rominger, 1876, Foss. Corals, Ham. Gr. [Ety. proper name.]  
*aspera*, Rominger, 1876, Foss. Corals, Up. Held. Gr. [Sig. rough.]  
*cæspitosa*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. turf-like.]  
*canadensis*, Rominger, 1876, Foss. Corals, Ham. Gr. [Ety. proper name.]  
*cervicornis*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. shaped like the horns of a stag.]  
*dichotoma*, Hall, 1858, Geo. Sur. Iowa, Ham. Gr. [Sig. dividing into two.]  
*expatiata*, Rominger, 1876, Foss. Corals, Up. Held. Gr. [Sig. spread out.]  
*fibrosa*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. fibrous.]  
*imbricata*, Rominger, 1876, Foss. Corals, Up. Held. Gr. [Sig. imbricated.]  
*labiosa*, Billings, 1859, Can. Jour., Corniferous Gr. [Sig. full lipped.]  
*laqueata*, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. paneled.]  
*lichenoides*, Winchell & Marcy, 1865, Bost. Soc. Nat. Hist., Niagara Gr. [Sig. resembling a lichen.]  
*macrophora*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. from the wide meshes.]  
*magna*, Hall, 1873, 23rd Reg. Rep., Up. Held. Gr. [Sig. great.]  
*multi-pora*, Hall 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. having many pores.]  
*palmata*, Hall, 1873, 23rd Reg. Rep., Up. Held. Gr. [Sig. having five lobes.]  
*pinguis*, Rominger, 1876, Foss. Corals, Up. Held. Gr. [Sig. plump.]  
*prolifera*, Hall, 1873, 23rd Reg. Rep., Up. Held. Gr. [Sig. prolific.]  
*pulchra*, Rominger, 1876, Foss. Corals, Up. Held. Gr. [Sig. beautiful.]  
*reticulata*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. reticulated.]  
*rimosa*, Rominger, 1876, Foss. Corals, Up. Held. Gr. [Sig. full of fissures.]  
*robusta*, Rominger, 1876, Foss. Corals, Corniferous & Ham. Gr. [Sig. robust.]  
*seriata*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. from the regular alternating series of openings.]  
*turgida*, Rominger, 1876, Foss. Corals, Up. Held. Gr. [Sig. swollen.]  
*verticillata*, Winchell & Marcy, Bost. Soc. Nat. Hist., Niagara Gr. [Sig. whorled.]
- CLIMACOGRAPTUS**, Hall, 1865, Can. Org. Rem. Decade 2. [Ety. *klímax*, a small ladder; *grapho*, to write.]  
*antennarius*, Hall, 1863, (*Graptolithus antennarius*) Geo. of Can., Quebec Gr. [Ety. from the *antennæ*.]  
*bicornis*, Hall, 1847, (*Graptolithus bicornis*) Pal. N. Y., vol. 1, Hud. Riv. Gr. [Ety. having two horns.] This is the type of the genus.  
*parvus*, Hall, 1865, Can. Org. Rem., Decade 2, Hud. Riv. Gr. [Sig. small.]  
*typicalis* Hall, 1865, Can. Org. Rem., Decade 2, Hud. Riv. Gr. [Ety. type of the genus, though the genus was founded on *C. bicornis*.]
- CLISIOPHYLLUM**, Dana, 1846, Explor. Exped., vol. 8. [Ety. *klision*, a tent; from the conical central boss; *phyllon*, a plant.]  
*gabbi*, Meek, 1864, Pal. California, Carb. [Ety. proper name.]  
*oneidænsæ*, Billings, 1859, Can. Jour. Corniferous Gr. [Ety. proper name.] This species is placed in the new genus *acrophyllum*, by Thomson & Nicholson.
- COLUMNARIA**, Goldfuss, 1826, Germ. Petref. [Ety. *Columnarius*, formed of columns.]  
*alveolata*, Goldfuss, 1826, Germ. Petref. Black Riv. Gr. [Sig. hollowed out.]  
*blainvilli*, Billings, 1858, Can. Nat. & Geo., vol. 3, Hud. Riv. Gr. [Ety. proper name.]  
*carterensis*, Safford, 1869, Geo. of Tenn., Trenton Gr. [Ety. proper name.]  
*divergens*, Troost, 1840, 5th Geo. Rep. Tenn., Devonian. [Sig. divergent.]  
*erratica*, Billings, 1858, Can. Nat. & Geo., Trenton Gr. [Sig. straying abroad.]  
*goldfussi*, Billings, 1858, Can. Nat. & Geo., vol. 3, Hud. Riv. Gr. [Ety. proper name.]  
*herzeri*, syn. for *Favistella stellata*.  
*incerta*, Billings, 1859, Can. Nat. & Geo., vol. 4, Chazy Gr. [Sig. uncertain.]  
*inequalis*, Hall, 1852, Pal. N. Y., vol. 2, Coralline limestone. [Sig. unequal.]  
*intermedia*, Eaton, 1832, Geo. Text Book, (?) Gr. [Sig. intermediate.]  
*parva*, Billings, 1859, Can. Nat. & Geo., vol. 4, Chazy Gr. [Sig. small.]  
*rigida*, Billings, 1858, Can. Nat. & Geo., vol. 3, Hud. Riv. Gr. [Sig. rigid.]  
*troosti*, Castelnau, 1843, syn. for *Lonsdaleia papillata*.
- COLUMNOPORA**, Nicholson, 1874, London Geo. Mag., N. S., vol. 1. [Ety. *columna*, a column; *pore*, a pore.]  
*cribriformis*, Nicholson, 1874, London Geo. Mag., vol. 1, Cin'ti Gr. [Sig. having the form of a sieve.]  
*huronica*, Rominger, 1876, (*Houghtonia huronica*) Foss. Corals, Hud. Riv. Gr. [Ety. proper name.]
- COMBOPHYLLUM**, Edwards & Haime, 1858. [Ety. *kombos*, a strip of cloth; *phyllon*, a plant.]

- multiradiatum, Meek, 1868, Trans. Chi. Acad. Sci., Devonian. [Sig. many rayed.]
- Conophyllum*, Hall, 1852. Syn. for *Chonophyllum*.
- niagarensis*, see *Chonophyllum Niagarensis*.
- Constellaria*, Dana, 1848, Zoophytes, syn. for *Stellipora*.
- constellata*, syn. for *Stellipora antheloidea*.
- polystomella*, Nicholson, syn. for *Stellipora antheloidea*.
- CYATHAXONIA, Michelin, 1846, Icon. Zooph. [Ety. *kuathus*, a cup; *axones*, a tablet made to turn on its axis.]
- distorta*, Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Sig. distorted.]
- prolifera*, see *Lophophyllum proliferum*.
- CYATHOPHYLLUM, Goldfuss, 1826, Petref. Germ. [Ety. *kuathus*, a cup; *phyllon*, a plant.]
- arcticum*, Meek, 1868, Trans. Chi. Acad. Sci., Devonian. [Sig. from the arctic regions of the north.]
- anticostiense*, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Ety. proper name.]
- billingsi*, Dawson, 1868, Acad. Geol. Low. Carb. [Ety. proper name.]
- caespitosum*, (?) Goldfuss, 1826, Petref. Germ., Corniferous Gr. [Sig. turfey.]
- calyculare*, Owen, 1840, Rep. on Min. Lands, Devonian. [Sig. like a flower bud.]
- ceratites*, as identified by D'Archiac & Verneuil. Not American.
- coalitum*, Rominger, 1876, Foss. Corals, Corniferous Gr. [Sig. grown together.]
- corinthium*, Owen, 1840, Rep. on Min. Lands, Devonian. [Ety. from resemblance to a Corinthian column.]
- cristatum*, Rominger, 1876, Foss. Corals, Ham. Gr. [Sig. tufted, crested.]
- dianthus*, (?) Goldfuss, 1826, Germ. Petref., Onondaga Gr. [Sig. the flower of Jove.]
- eriphele*, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Ety. mythological name.]
- eurvone*, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Ety. mythological name.]
- excentricum*, as identified by D'Archiac & Verneuil. Not American.
- flexuosum*, (?) Owen, syn. for *Campophyllum torquium*.
- geniculatum*, Rominger, 1876, Foss. Corals, Ham. Gr. [Sig. knotted, geniculated.]
- gigas*, Yandell & Shumard, 1847, Contrib. to Geol. Ky., Devonian. [Sig. large.]
- gracile*, Troost, 1840, 5th Geo. Rep. Tenn. Low. Carb. [Sig. slender.]
- helianthoides*, Goldfuss, 1826, Germ. Petref., Devonian. [Sig. rayed like the sunflower.] See *Heliophyllum halli*.
- houghtoni*, Rominger, 1876, Foss. Corals, Devonian. [Ety. proper name.]
- interruptum*, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Sig. interrupted.]
- juvenis*, Rominger, 1876, Foss. Corals, Up. Held. Gr. [Sig. young.]
- lesueuri*, Hall, 1859, figured without specific name in 1843, 4th Dist. Rep. N. Y., Onondaga Gr. [Ety. proper name.]
- nymphale*, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Ety. a fountain.]
- panicum*, Winchell, 1866, Rep. Low. Pen. Mich., Ham. Gr. [Sig. panic, or straggling appearance.]
- partitum*, Winchell, 1866, Rep. Low. Pen. Mich., Ham. Gr. [Ety. from the vertical partitions in the internal cavity.]
- pasitheia*, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Ety. mythological name.]
- pelagicum*, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Sig. belonging to the deep sea.]
- pennanti*, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Ety. proper name.]
- profundum*, Conrad, see *Streptelasma profunda*.
- quadriginum*, as identified by d'Archiac & Verneuil. Not American.
- radicula*, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. a little root.]
- rugosum*, Edwards & Haime, 1851, Pal. Foss. des Terr. Palaeoz., Corniferous Gr. [Sig. wrinkled.]
- scyphus*, Rominger, 1876, Foss. Corals, Ham. Gr. [Sig. a cup.]
- shumardi*, see *Amplexus shumardi*.
- solitarium*, Billings, 1866, Catal. Sil. Foss. Antic., Clinton & Niagara Gr. [Sig. alone.]
- torquium*, see *Campophyllum torquium*.
- turbinatum*, of the N. Y. Rep's, see *Heliophyllum halli*.
- undulatum et multiplicatum*, Owen, 1840, Rep. on Min. lands, Devonian. [Sig. many waved lines.]
- vanuxemi*, Hall, 1859, figured without specific name in 1843, 4th Dist. Rep. N. Y., Ham. Gr. [Ety. proper name.]
- vermiculare*, (?) Owen, syn. for *Campophyllum torquium*.
- wahlenbergi*, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Ety. proper name.]
- Cyathopora iowensis*, see *Striatopora iowensis*. There is no genus *Cyathopora*, and if Dr. Owen did not intend to refer his species to *Cyathopora*, then he failed to establish a genus by neglecting to define it.
- CYCLOLITES, Lamarck, 1801, Syst. Anim. sans. Verteb. [Ety. *kuklos*, a circle; *lithos*, a stone.]
- rotuloides*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Ety. *rotula*, a little wheel; *eidos*, a form.]
- CYSTIPHYLLUM, Lonsdale, 1839, Murch. Sil. Syst. [Ety. *kustia*, a vesicle or small cavity; *phyllon*, a plant.]
- aggregatum*, Billings, 1859, Can. Jour. Ham. Gr. [Sig. aggregated.]
- americanum*, Edwards & Haime, 1851, Monogr. Pal. Foss., Ham. Gr. [Ety. proper name.]



- americanum* var. *arcticum*, Meek, 1868, Trans. Chi. Acad. Sci., Ham. Gr. [Ety. from the arctic or northern region.]
- cylindricum*, (not Lonsdale) see *Cystiphyllum americanum*.
- fruticosum*, Nicholson, 1875, Geo. Mag., vol. 2, N. S., Corniferous Gr. [Sig. full of stems.]
- grande*, Billings, 1859, Can. Jour., Corniferous Gr. [Sig. large.]
- huronense*, Billings, 1866, Catal. Sil. Foss. Antic., Clinton & Niagara Gr. [Ety. proper name.]
- maritima*, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Sig. of the sea.]
- mundulum*, Hall, 1873, 23d Reg. Rep., Chemung Gr. [Sig. fine, neat.]
- ohioense*, Nicholson, 1875, Ohio Pal., vol. 2, Corniferous Gr. [Ety. proper name.]
- senecaense*, Billings, 1859, Can. Jour., Devonian. [Ety. proper name.]
- squamosum*, Nicholson, 1875, Geo. Mag. N. S., vol. 2, Corniferous Gr. [Sig. rough or scaly.]
- sulcatum*, Billings, 1859, Can. Nat. & Geo., vol. 4, Corniferous Gr. [Sig. furrowed.]
- superbum*, Nicholson, 1875, Geo. Mag., vol. 2, N. S., Ham. Gr. [Sig. stately, nice.]
- vesiculosum*, Goldfuss, 1826, Petref. Germ. Devonian. [Sig. full of vesicles.]
- DAWSONIA**, Nicholson, 1873, Ann. Mag. Nat. Hist. 4th ser., vol. 12. [Ety. proper name.] Supposed to be the ovarian vesicles of Graptolites.
- acuminata*, Nicholson, 1873, Ann. Mag. Nat. Hist., 4th ser., vol. 12, Quebec Gr. [Sig. pointed.]
- campanulata*, Nicholson, 1873, Ann. Mag. Nat. Hist., Quebec Gr. [Sig. bell-shaped.]
- rotunda*, Nicholson, 1873, Ann. Mag. Nat. Hist., Quebec Gr. [Sig. round.]
- tenuistriata*, Nicholson, 1873, Ann. Mag. Nat. Hist., Quebec Gr. [Sig. finely striated.]
- DENDROGRAPTUS**, Hall, 1865, Can. Org. Rem., Decade 2. [Ety. *dendron*, a tree; *grapho*, to write.]
- diffusus*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Sig. diffused, hanging loose.]
- divergens*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Ety. *divergo*, to extend from a point in different directions.]
- erectus*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Sig. standing upright.]
- flexuosus*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Sig. crooked.]
- fruticosus*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Sig. full of shoots or stems.]
- gracilis*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Sig. slender.]
- hallianus*, Prout, 1851, (Graptolithus hallianus) Am. Jour. Sci. 2d ser., vol. 11, Potsdam sandstone. [Ety. proper name.]
- striatus*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Sig. striated.]
- DENDROPORA**, Michelin, 1846, Icon. Zooph. [Ety. *dendron*, a tree; *pora*, a pore.]
- alternans*, Rominger, 1876, Foss. Corals Ham. Gr. [Sig. alternately.]
- neglecta*, Rominger, 1876, Foss. Corals, Up. Held. Gr. [Sig. overlooked.]
- ornata*, Rominger, 1876, Foss. Corals, Ham. Gr. [Sig. ornamented.]
- proboscoidialis*, Rominger, 1876, Foss. Corals, Ham. Gr. [Sig. having a proboscis.]
- reticulata*, Rominger, 1876, Foss. Corals, Ham. Gr. [Sig. reticulated.]
- Dichograpthus*, syn. for Graptolithus.
- DICRANOGRAPTUS**, Hall, 1865, Can. Org. Rem., Decade 2. [Ety. *dikranos*, two pointed; *grapho*, to write.]
- divaricatus*, Hall, 1859, (Graptolithus divaricatus) Pal. N. Y., vol. 3, Hud. Riv. Gr. [Sig. wide apart.]
- furcatus*, Hall, 1847, (Graptolithus furcatus) Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. forked.]
- ramosus*, Hall, 1847, (Graptolithus ramosus) Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. branching.]
- sextans*, Hall, 1847, (Graptolithus sextans) Pal. N. Y., vol. 1, Hud. Riv. Gr. [Ety. *sextans*, a sixth part; probably named from the regular diverging bifurcations at an angle of sixty degrees.]
- DICTYONEMA**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *dictyon*, a net; *nema*, a thread.]
- cadens*, Hall, 1865, Can. Org. Rem., Decade 2, Ham. Gr. [Sig. drooping.]
- fenestrata*, Hall, 1868, 20th Reg. Rep., Up. Held. Gr. [Sig. having openings.]
- gracilis*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. slender.]
- grandis*, Nicholson, 1873, Ann. Mag. Nat. Hist., 4th ser., vol. 12, Quebec Gr. [Sig. grand.]
- hamiltoniae*, Hall, 1865, Can. Org. Rem., Decade 2, Ham. Gr. [Ety. proper name.]
- irregularis*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Sig. irregular.]
- murrayi*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Ety. proper name.]
- neenah*, Hall, 1861, Geo. Rep. Wis. Trenton Gr. [Ety. proper name.]
- quadrangularis*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Sig. four sided.]
- retiformis*, Hall, 1843, (Gorgonia retiformis) Geo. Rep. 4th Dist. N. Y., Niagara Gr. [Sig. net-formed.]
- robusta*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Sig. hardy, strong.]

- splendens, Billings, 1874, Pal. Foss. vol. 2, Up. Sil. [Sig. splendid.]
- websteri, Dawson, 1868, Acad. Geol., Niagara Gr. [Ety. proper name.]
- DICTYOSTROMA, Nicholson, 1875, O. Pal., vol. 2. [Ety. *dictyon*, a net; *stroma*, a layer.]
- undulata, Nicholson, 1875, Ohio Pal. vol. 2, Niagara Gr. [Ety. from the undulating layers.]
- DIDYMOGRAPTUS, McCoy, 1851, Pal. Foss. [Ety. *didymos*, twin or double; *grapho*, to write.]
- caduceus, Salter, 1853, (Graptolithus caduceus) Quar. Jour. Geo. Soc., vol. 9, Quebec Gr. [Sig. falling down, frail.]
- DIPHYPHYLLUM, Lonsdale, 1845, Russ. & Ural. Mts. [Ety. *diphyia*, a division; *phyllon*, a leaf.]
- archiaci, Billings, 1859, Can. Jour., Up. Held. & Ham. Gr. [Ety. proper name.]
- arundinaceum, Billings, 1859, Can. Jour. Corniferous Gr. [Sig. like a reed.]
- caespitosum, Hall, 1852, (Diplophyllum caespitosum) Pal. N. Y., vol. 2, Niagara Gr. [Sig. turf-like.]
- coralliferum, Hall, 1852, (Diplophyllum coralliferum) Pal. N. Y., vol. 2, Coral-line limestone. [Ety. *corallum*, a coral; *fero*, to bear; in allusion to the fact that the specimens were found enclosed in a species of *Stromatopora*.]
- gigas, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. great.]
- huronicum, Rominger, 1876, Foss. Corals, Niagara Gr. [Ety. proper name.]
- rectiseptatum, Rominger, 1876, Foss. Corals, Ham. Gr. [Ety. from the straight septae.]
- stramineum, Billings, 1859, Can. Jour., Corniferous Gr. [Sig. made of straw.]
- DIPLOGRAPTUS, McCoy, 1854, (Diplograpsus) Brit. Pal. Rocks. [Ety. *diploos*, duplex; *grapho*, to write.]
- amplexicaulis, Hall, 1847, (Graptolithus amplexicaule) Pal. N. Y., vol. 1, Trent. Gr. [Ety. *amplexus*, embracing; *caulis*, a stalk or stem; in allusion to the triangular scales surrounding the central stipe.]
- angustifolius, Hall, 1859, (Graptolithus angustifolius) Pal. N. Y., vol. 3, Hud. Riv. Gr. [Sig. narrow-leaved.]
- ciliatus, Emmons, 1856, Am. Geol., Trent. Gr. [Sig. fringed.]
- dissimilaris, Emmons, 1856, Am. Geol., Quebec Gr. [Sig. dissimilar.]
- foliaceus, (?) Murch, 1839, (*Graptolites foliaceus*) Murch, Sil. Syst., Hud. Riv. Gr. [Sig. leaf-like.]
- foliosus, Emmons, 1856, Am. Geol., Quebec Gr. [Sig. full of leaves.]
- folium, (?) Hisinger, 1837, (Prionotus folium) Leth. Suec., Hud. Riv. Gr. [Sig. a leaf or thin plate.]
- inutilis, Hall, 1865, Can. Org. Rem., Dec. 2, Quebec Gr. [Sig. not useful.]
- laciniatus, Emmons, 1856, Am. Geol., Quebec Gr. [Sig. pointed, jagged.]
- marcidus, Hall, 1859, (Graptolithus marcidus) Pal. N. Y., vol. 3, Hud. Riv. Gr. [Sig. rotten, flagging, from the shrunken stipe.]
- mucronatus, Hall, 1847, (Graptolithus mucronatus) Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. sharp-pointed.]
- obliquus, Emmons, 1856, Am. Geol., Quebec Gr. [Sig. oblique.]
- peosta, Hall, 1861, (Graptolithus peosta) Geo. Rep. Wis., Trenton Gr. [Ety. proper name. (?)]
- pristiniformis, Hall, 1858, (Graptolithus pristiniformis) Rep. of Progr. Can. Sur., Quebec Gr. [Sig. an ancient form.] This species is probably identical with *Fucoides dentata*, Brongniart, 1828, Hist. Veg. Foss., vol. 1.
- pristis, (?) Hisinger, 1837, (Prionotus pristis) Leth. Suec., Hud. Riv. Gr. [Sig. a saw fish.]
- putillus, Hall, 1865, Can. Org. Rem., Decade 2, Hud. Riv. Gr. [Sig. a dwarf.]
- rugosus, Emmons, 1856, Am. Geol., Quebec Gr. [Sig. rugose.]
- rectangularis, McCoy, 1854, Brit. Pal. Rocks, Low. Sil. [Sig. rectangular.]
- secalinus, Eaton, 1847, (Fucoides secalinus) Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. resembling a small grain.]
- setaceus, Emmons, 1856, (Glossograpsus setaceus) Am. Geol., Quebec Gr. [Sig. hairy.]
- spinulosus, Hall, 1859, (Graptolithus spinulosus) Pal. N. Y., vol. 3, Hud. Riv. Gr. [Sig. full of little spines.]
- whitfieldi, Hall, 1859, (Graptolithus whitfieldi) Pal. N. Y., vol. 3, Hud. Riv. Gr. [Ety. proper name.]
- Diplophyllum*, Hall, 1852, Pal. N. Y., vol. 2, syn. for *Diphyphyllum*.
- caespitosum*, see *Diphyphyllum caespitosum*.
- coralliferum*, see *Diphyphyllum coralliferum*.
- DISCOPHYLLUM, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *diskos*, a disc; *phyllon*, a leaf.]
- peltatum, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. half-moon-shaped.]
- DUNCANELLA, Nicholson, 1874, Ann. Mag. Nat. Hist., 4th ser., vol. 13. [Ety. proper name.]
- borealis, Nicholson, 1874, Ann. Mag. Nat. Hist., 4th ser., vol. 13, Niagara Gr. [Sig. belonging to northern latitudes.]
- EMMONSIA, Edwards & Haime, 1851, Monographie des Polyp., Foss. des Terr. Palaeoz. [Ety. proper name.]
- hemispherica, Troost, 1840, (Calamopora hemispherica) 5th Geo. Rep. Tenn., Corniferous Gr. (Sig. hemispherical.)
- hemispherica*, Yandell & Shumard, 1847, (Favosites hemispherica) Contrib. to Geol. of Ky., Corniferous Gr. This species was first described by Troost, who gave the Falls of the Ohio as one of its localities.

- ERIDOPHYLLUM**, Edwards & Haime, 1850, Brit. Foss. Corals. [Ety. *eridos*, in dispute; *phyllon*, a plant.]
- rugosum**, Edwards & Haime, 1851, Pol. Foss. des Terr. Pal., Niagara Gr. [Sig. wrinkled.]
- simcoense**, Billings, 1859, Can. Jour., new ser., vol. 4., Clinton Gr. [Ety. proper name.]
- strictum**, Edwards & Haime, 1851, Pol. Foss. des Terr. Pal., Corniferous Gr. [Sig. gathered, narrow.]
- vennori**, Billings, 1865, Can. Nat. & Geo., 2d ser., vol. 2, Clinton Gr. [Ety. proper name.]
- verneuilianum**, Edwards & Haime, 1851, Pol. Foss. des Terr. Pal., Corniferous Gr. [Ety. proper name.]
- ETHMOPHYLLUM**, Meek, 1868, Am. Jour. Sci. & Arts, 2d ser., vol. 45. [Ety. *ethmos*, a sieve; *phyllon*, a plant.]
- gracile**, Meek, 1868, Am. Jour. Sci. & Arts, 2d ser., vol. 45, Up. Sil. [Sig. slender.]
- whitneyi**, Meek, 1868, Am. Jour. Sci. & Arts, 2d ser., vol. 45, Up. Sil. [Ety. proper name.]
- FAVIPHYLLUM**, as used by Hall, 1852, Stans. Exped. to Great Salt Lake. [Ety. *favus*, honey-comb; *phyllon*, a plant.]
- rugosum**, Hall, 1852, Stansbury's Exped. to Great Salt Lake, Coal Meas. [Sig. wrinkled.]
- FAVISTELLA**, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *favus*, honey-comb; *stella*, a star.]
- favosidea**, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. honey-comb-like.]
- stellata**, Hall, 1847, Pal. N. Y., Hudson Riv. Gr. [Sig. starred.]
- FAVOSITES**, Lamarck, 1812, Cours. de Zool. du Mus. d'Hist. Nat. [Ety. *favus*, honey-comb.]
- alpenensis**, Winchell, 1866, Rep. Low. Pen. Mich., Ham. Gr. [Ety. proper name.]
- alveolaris**, DeBlainville, 1834, Man. d'Actinol., as identified by Hall, in 1843, Onondaga Gr. [Sig. full of cells.]
- asper**, D'Orbigny, 1849, Prodr. de Palaeont., Clinton Gr. [Sig. rough.]
- basalticus**, Goldfuss, 1826, Germ. Petref., (Calamopora basaltica) Devonian. [Sig. basaltic.]
- billingsi**, Rominger, 1876, Foss. Corals, Ham. Gr. [Ety. proper name.]
- capax**, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. large.]
- cervicornis**, DeBlainville, as identified by Billings, 1859, Can. Jour., vol. 4, Devonian. [Sig. deer-horned.]
- clausus**, Rominger, 1876, Foss. Corals, Devonian. [Sig. closed up.]
- conicus**, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. cone-shaped.]
- constrictus**, Hall, 1852, (Astrocerium constrictum) Pal. N. Y., vol. 2, Niagara Gr. [Sig. constricted.]
- cristatus**, Edwards & Haime, 1851, Pol. Foss. Terr. Palaeoz., Niagara Gr. [Sig. peaked.]
- cumberlandicus**, Troost, 1840, (Calamopora cumberlandica) 5th Geo. Rep. Tenn., Low. Carb. [Ety. proper name.]
- digitatus**, Rominger, 1876, Foss. Corals, Ham. Gr. [Sig. fingered.]
- dubius**, Blainville, 1839, (Alveolites dubia) Corniferous Gr. [Sig. doubtful.]
- dumosus**, Winchell, 1866, Rep. Low. Pen. Mich., Ham. Gr. [Sig. bushy, clustered.]
- emmonsii**, Rominger, 1876, Foss. Corals, Up. Held. Gr. [Ety. proper name.]
- epidermatus**, Rominger, 1862, Am. Jour. Sci. & Arts, Corniferous Gr. [Sig. covered with a crust or skin.]
- excretus**, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. separated.]
- favosus**, Goldfuss, 1826, Germ. Petref., (Calamopora favosa) Niagara Gr. [Sig. honey-combed.]
- forbesi**, Edwards & Haime, 1854, Brit. Foss. Corals, Niagara Gr. [Ety. proper name.]
- forbesi**, var. *discoideus*, Roemer, 1860, (Calamopora forbesi, var. *discoidea*) Sil. Fauna W. Tenn., Niagara Gr. [Sig. like a dish.]
- goldfussi**, D'Orbigny, 1850, Prodr. de Palaeont, Devonian. [Ety. proper name.]
- gothlandicus**, Lamarck, 1816, Hist. An. sans. Vert., Up. Sil. [Ety. proper name.]
- hamiltonensis**, Rominger, 1876, Foss. Corals, Ham. Gr. [Ety. proper name.]
- helderbergiae**, Hall, 1874, 26th Reg. Rep. Low. Held. Gr. [Ety. proper name.]
- heliolitiformis**, Rominger, 1862, (Calamopora heliolitiformis) Am. Jour. Sci., vol. 34, 2nd series, Devonian. [Sig. from its resemblance to *Heliolites*.]
- hemisphericus**, see *Emmonsia hemispherica*.
- hisingeri**, Edwards & Haime, 1851, Pal. Foss. des Terr. Palaeoz., Niagara Gr. [Ety. proper name.]
- hispidus**, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. bristly.]
- infundibuliformis**, as identified by d'Archiac & Verneuil. Not America.
- intertextus**, Rominger, 1876, Foss. Corals, Ham. Gr. [Sig. interlaced.]
- invaginatus**, Nicholson, 1875, Ohio Pal., vol. 2, Corniferous Gr. [Sig. sheathed, enwrapped.]
- limitaris**, Rominger, 1876, Foss. Corals, Corniferous Gr. [Sig. on the border, from its resemblance to *Cladopora*.]
- lycoperdon**, see *Monticulipora lycoperdon*.
- manus**, Winchell, 1863, Proc. Acad. Nat. Sci., Kinderhook Gr. [Sig. the hand.]
- maximus**, Troost, 1840, (Calamopora maxima) 5th Geo. Rep. Tenn., Devonian. [Sig. largest.]

- minimus, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. smallest.]  
 niagarensis, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Ety. proper name.]  
 niagarensis, var. spinigerus, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. spiny.]  
 nitellus, Winchell, 1866, Rep. Low. Pen. Mich., Ham. Gr. [Sig. delicate, smooth.]  
 obliquus, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. oblique.]  
*parasiticus*, Hall, 1852, (Astrocerium parasiticum) Pal. N. Y., vol. 2, Niagara Gr. [Sig. parasitic.] This name was preoccupied by Phillips in his Geol. of Yorkshire.  
 placenta, Rominger, 1876, Foss. Corals, Ham. Gr. [Sig. a cake.]  
 pleurodictyloides, Nicholson, 1875, Ohio Pal., vol. 2, Corniferous Gr. [Sig. resembling *Pleurodictyum*.]  
 polymorphus, Goldfuss, 1826, Germ. Petref., Corniferous Gr. [Sig. having many-forms.]  
 prolificus, Billings, 1865, Can. Nat. & Geol., 2d series, vol. 2, Mid. Sil. [Sig. abundant.]  
 pyriformis, Hall, 1852, (Astrocerium pyriforme) Pal. N. Y., vol. 2, Niagara Gr. [Sig. pear-shaped.]  
 radiatus, Rominger, 1876, Foss. Corals, Ham. Gr. [Sig. radiated.]  
 radiformis, Rominger, 1876, Foss. Corals, Devonian. [Sig. root-like.]  
 reticulatus, DeBlainville, 1830, (Alveolites reticulata) Dict., vol. 60, Niagara Gr. [Sig. reticulated.]  
 spongilla, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. a little sponge.]  
 striatus, Say, 1818, Am. Jour. Sci., vol. 1, Niagara Gr. [Sig. striated.]  
 tuberosus, Rominger, 1876, Foss. Corals, Corniferous Gr. [Sig. composed of tubes.]  
 turbinatus, Billings, 1859, Can. Jour., vol. 4, Corniferous Gr. [Sig. top-shaped.]  
 venustus, Hall, 1852, (Astrocerium venustum) Pal. N. Y., vol. 2, Niagara Gr. [Sig. elegant.]  
 whitfieldi, White, 1874, Rep. Invert. Foss., Low. Carb. [Ety. proper name.]  
 winchelli, Rominger, 1862, (Calamopora winchelli) Am. Jour. Sci., vol. 34, 2d ser., Devonian. [Ety. proper name.]  
*Filicites gracilis*, Shumard, see *Plumalina gracilis*.  
 FISTULIPORA, McCoy, 1849, Ann. & Mag. Nat. Hist., 2d ser., vol. 3. [Ety. *fistula*, a pipe; *pore*, a pore.]  
 acervulosa, Rominger, 1866, Proc. Acad. Nat. Sci., Ham. Gr. [Sig. many clustered together.]  
 canadensis, Billings, 1859, Can. Nat. & Geo., vol. 4, Devonian. [Ety. proper name.]  
 compressa, Rominger, 1866, Proc. Acad. Nat. Sci., Keokuk Gr. [Sig. compressed.]  
 crassa, Rominger, 1866, Proc. Acad. Nat. Sci., Ham. Gr. [Sig. thick.]  
 elegans, Rominger, 1866, Proc. Acad. Nat. Sci., Ham. Gr. [Sig. elegant.]  
 eriensis, Rominger, 1866, Proc. Acad. Nat. Sci., Ham. Gr. [Ety. proper name.]  
 flabellum, Rominger, 1866, Proc. Acad. Nat. Sci., Warsaw Gr. [Sig. fan-like.]  
 halli, Rominger, 1866, Proc. Acad. Nat. Sci., Niagara Gr. [Ety. proper name.]  
 helios, Rominger, 1866, Proc. Acad. Nat. Sci., Corniferous Gr. [Sig. the sun.]  
 labiosa, Winchell, 1866, Rep. Low. Pen. Mich., Ham. Gr. [Sig. full-lipped.]  
 lunata, Rominger, 1866, Proc. Acad. Nat. Sci., Up. Held. Gr. [Sig. crescent-shaped.]  
 minuta, Rominger, 1866, Proc. Acad. Nat. Sci., Ham. Gr. [Sig. very small.]  
 neglecta, Rominger, 1866, Proc. Acad. Nat. Sci., Niagara Gr. [Sig. overlooked.]  
 nodulifera, Meek, 1872, Pal. E. Neb., Coal Meas. [Sig. bearing knots.]  
 occidens, Hall, 1873, 23d Reg. Rep., Chemung Gr. [Sig. western.]  
 peculiaris, Rominger, 1866, Proc. Acad. Nat. Sci., Keokuk Gr. [Sig. peculiar.]  
 saffordi, Winchell, 1866, Rep. Low. Pen. Mich., Ham. Gr. [Ety. proper name.]  
 spergenenensis, Rominger, 1866, Proc. Acad. Nat. Sci., Warsaw Gr. [Ety. proper name.]  
 spinulifera, Rominger, 1866, Proc. Acad. Nat. Sci., Ham. Gr. [Sig. spine-bearing.]  
 stellifera, Rominger, 1866, Proc. Acad. Nat. Sci., Ham. Gr. [Sig. star-bearing.]  
 sulcata, Rominger, 1866, Proc. Acad. Nat. Sci., Ham. Gr. [Sig. furrowed.]  
 trifolia, Rominger, 1866, Proc. Acad. Nat. Sci., Keokuk Gr. [Sig. three-leaved.]  
 utriculus, Rominger, 1866, Proc. Acad. Nat. Sci., Ham. Gr. [Sig. a little bag.]  
*Glossograptus*, Emmons, (Glossograpsus) 1856, Am. Geol., pt. 2. Prof. Hall uses the termination *graptus*, instead of *grapsus*, because the latter termination is used in the nomenclature of crustacea. This genus is a synonym for *Diplograptus*.  
*ciliatus*, Emmons, 1856, Am. Geol. This name will be found preoccupied by Emmons, under the genus *Diplograptus*.  
*setaceus*, Emmons, 1856, Am. Geol. See *Diplograptus setaceus*.  
 GRAPTOLITHUS, Linnæus, 1736, Syst. Naturæ. [Ety. *grapho*, to write; *lithos*, stone.]  
 abnormis, Hall, 1858, Rep. of Progr. Can. Sur., Quebec Gr. [Sig. abnormal.]  
 alatus, Hall, 1858, Rep. of Progr. Can. Sur., Quebec Gr. [Sig. winged.]  
*amplexicaule*, see *Diplograptus amplexicaulis*.  
*angustifolius*, see *Diplograptus angustifolius*.

- antennarius*, see *Climacograptus antennarius*.
- arcuatus*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Sig. bent, bow-shaped.]
- belmontensis*, White, conditional name.
- bicornis*, see *Climacograptus bicornis*.
- bifidus*, Hall, 18' 8, Can. Nat. & Geo., vol. 3, Quebec Gr. [Ety. *bis*, twice; *fdi*, to split.]
- bigsbayi*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Ety. proper name.]
- bryonoides*, Hall, 1858, Rep. of Progr. Can. Sur., Quebec Gr. [Sig. like moss.] Same species called *Fucoides serra*, Brongiat, 1828, Veg. Foss., vol. 1. See *Tetragraptus bryonoides*.
- caduceus*, see *Didymograptus caduceus*.
- clintonensis*, Hall, 1843, Geo. Rep., 4th Dist. N. Y., Clinton Gr. [Ety. proper name.]
- constrictus*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Sig. constricted.]
- crucifer*, Hall, 1858, Rep. of Progr. Can. Sur., Quebec Gr. [Sig. the cross-bearer.]
- dentatus*, Emmons, 1842, Geo. Rep. N. Y., Utica slate. [Sig. toothed.] This may be *Fucoides dentatus* of Brongiat.
- denticulatus*, Hall, 1858, Rep. of Progr. Can. Sur., Quebec Gr. [Sig. small-toothed.]
- divaricatus*, Hall, 1859, Pal. N. Y., vol. 3, Hud. Riv. Gr. [Sig. wide apart.] See *Dicranograptus divaricatus*.
- divergens*, Hall, 1859, Pal. N. Y., vol. 3, Hud. Riv. Gr. [Sig. to extend from a point in different directions.]
- ensiformis*, see *Retiolites ensiformis*.
- extensus*, Hall, 1858, Rep. of Progr. Can. Sur., Quebec Gr. [Sig. extended.]
- extenuatus*, Hall, 1865, Can. Org. Rem. Decade 2, Quebec Gr. [Sig. thinned away.]
- flaccidus*, Hall, 1865, Can. Org. Rem. Decade 2, Utica shales. [Sig. withered.]
- flexilis*, Hall, 1858, Rep. of Progr. Can. Sur., Quebec Gr. [Sig. pliant, flexible.] See *Chonograptus flexilis*.
- foliaceus*, see *Diplograptus foliaceus*.
- folium*, (?) see *Diplograptus folium*.
- fruticosus*, Hall, 1858, Rep. of Progr., Quebec Gr. [Sig. bushy.]
- furcatus*, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. forked.] See *Dicranograptus furcatus*.
- gracilis*, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. slender.]
- hallianus*, see *Dendrograptus hallianus*.
- headi*, Hall, 1858, Rep. of Progr. Can. Sur., Quebec Gr. [Ety. proper name.]
- hypniformis*, see *Diplograptus hypniformis*.
- indentus*, Hall, 1858, Rep. of Progr. Can. Sur., Quebec Gr. [Sig. indented.]
- lævis*, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. smooth.]
- logani*, Hall, 1858, Rep. of Progr. Can. Sur., Quebec Gr. [Ety. proper name.]
- marcidus*, see *Diplograptus marcidus*.
- milesi*, Hall, 1861, Geo. Rep. Vermont, Quebec Gr. [Ety. proper name.]
- mucronatus*, see *Diplograptus mucronatus*.
- multifasciatus*, Hall, 1865, Decade 2, Can. Org. Rem., Hud. Riv. Gr. [Sig. many swathed or banded.]
- nitidus*, Hall, 1858, Rep. of Progr. Can. Sur., Quebec Gr. [Sig. neat.]
- octobrachiatus*, Hall, 1858, Rep. of Progr. Can. Sur., Quebec Gr. [Sig. having eight arms.]
- octonarius*, Hall, 1858, Rep. of Progr. Can. Sur., Quebec Gr. [Sig. belonging to the number eight.]
- patulus*, Hall, 1858, Rep. of Progr. Can. Sur., Quebec Gr. [Sig. spread out.]
- pennatulus*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Sig. having small wings.]
- peosta*, see *Diplograptus peosta*.
- pristis*, see *Diplograptus pristis*.
- putillus*, see *Diplograptus putillus*.
- pristiniformis*, see *Diplograptus pristini-formis*.
- quadribrachiatus*, Hall, 1858, Rep. of Progr. Sur. Can., Quebec Gr. [Sig. having four arms.] See *Tetragraptus quadribrachiatus*.
- quadrimumcronatus*, Hall, 1865, Can. Org. Rem., Decade 2, Utica shales. [Sig. having four sharp points or spines.]
- ramosus*, see *Dicranograptus ramosus*.
- ramulus*, Hall, 1865, Can. Org. Rem. Decade 2, Quebec Gr. [Sig. a little branch.]
- ramulus*, White, 1874, Rep. Invertebrate Foss., Trenton Gr. This name was preoccupied by Hall in 1865.
- richardsoni*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Ety. proper name.]
- rigidus*, see *Chonograptus rigidus*.
- scalaris*, Linnaeus as identified by Vanuxem, 1842, Geo. Rep. 3rd Dist. N. Y., Utica slate. [Sig. a ladder.]
- secalinus*, see *Diplograptus secalinus*.
- serratulus*, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. like a small saw.]
- sagittarius*, Hisinger, 1837, (*Prionotus sagittarius*) Leth. Suec. Supp., Hud. Riv. Gr. [Sig. an archer.]
- sextans*, see *Dicranograptus sextans*.
- similis*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Sig. like in aspect.]
- spinulosus*, see *Diplograptus spinulosus*.
- tentaculatus*, see *Retiograptus tentaculatus*.
- tenuis*, (?) Portlock, 1843, Geo. Rep. Londonderry, Hud. Riv. Gr. [Sig. slender.]
- tenuis*, Hall. This name was preoccupied by Portlock, in 1843.
- venosus*, see *Retiolites venosus*.
- whitfieldi*, see *Diplograptus whitfieldi*.

- HADROPHYLLUM**, Edwards & Haime, 1850, Brit. Foss. Corals. [Ety. *hadros*, mighty; *phyllon*, a plant.]  
orbignyi, Edwards & Haime, 1850, Brit. Foss. Corals, Devonian. [Ety. proper name.]
- HAIMEOPHYLLUM**, Billings, 1859, Can. Jour., vol. 4. [Ety. proper name; *phyllon*, a plant.]  
ordinatum, Billings, 1859, Can. Jour., vol. 4, Corniferous Gr. [Sig. well-arranged.]
- HALYSITES**, Fischer, 1813, Zoognosia, vol. 1. [Ety. *halsion*, a small chain or necklace.]  
agglomeratus, Hall, 1843, (Catenipora agglomerata) Geo. Rep., 4th Dist. N. Y., Niagara Gr. [Sig. to gather into a mass.]  
catenulatus, Linnæus, 1767, Syst. Nat., Niagara Gr. [Ety. *catena*, a chain; *latus*, wide.]  
compactus, Rominger, 1876, Foss. Corals, Niagara Gr. Syn. for *H. agglomerata*.  
escharoides, Lamarck, 1816, Hist. des Anim. sans Vert., Niagara Gr. [Sig. grate-shaped.]  
gracilis, Hall, 1851, Geo. Lake Sup. Land Dist., vol. 2, Hud. Riv. Gr. [Sig. slender.]  
*meandrina*, Troost, 1840, (Catenipora meandrina) 5th Geo. Rep. Tenn., Niagara Gr. The definition is too meagre for identification.
- HELIOLITES**, Dana, 1846, Zooph. [Ety. *helios*, sun; *lithos*, stone.]  
affinis, Billings, 1865, Can. Nat. & Geo., 2d ser., vol. 2, Hud. Riv. & Mid. Sil. [Sig. contiguous.]  
elegans, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. elegant.]  
exiguus, Billings, 1865, Can. Nat. & Geo., 2d ser., vol. 2, Mid. Sil. [Sig. little.]  
interstinctus, Linne, 1767, (Madrepora interstincta) Syst. Nat., Niagara Gr. [Sig. divided.]  
macrostylus, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Ety. *makros*, long; *stylos*, a column.]  
megastoma, McCoy, 1851, Brit. Pal. Foss., Niagara Gr. [Ety. *megas*, great; *stoma*, mouth.]  
pyriformis, Guett., 1770, Mem. 3, Niagara Gr. [Sig. pear-shaped.]  
sparsus, Billings, 1865, Can. Nat. & Geo., 2d ser., vol. 2, Mid. Sil. [Sig. scattered.]  
speciosus, Billings, 1865, Can. Nat. & Geo., 2d ser., vol. 2, Mid. Sil. [Sig. beautiful.]  
spinoporus, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Ety. *spina*, a spine; *porus*, a pore.] In allusion to the spiniform rays in the interior of the tubes.  
subtubulatus, McCoy, as identified by Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. somewhat like *H. tubulatus*.]  
tenuis, Billings, 1865, Can. Nat. & Geo., 2d ser., vol. 2, Mid. Sil. [Sig. slender.]
- HELIOPHYLLUM**, Hall, 1846, in Dana Zooph. [Ety. *helios*, the sun; *phyllon*, a plant.]  
colbornense, Nicholson, 1875, Can. Nat. & Geol., Corniferous Gr. [Ety. proper name.]  
colligatum, Billings, 1859, Can. Jour., Up. Held. Gr. [Sig. collected together.]  
exiguum, Billings, 1859, Can. Jour., Corniferous Gr. [Sig. little.]  
erienne, Billings, 1859, Can. Jour., vol. 4, Corniferous Gr. [Ety. proper name.]  
halli, Edwards & Haime, 1850, Brit. Foss. Corals, Ham. Gr. [Ety. proper name.]  
canadense, Billings, 1859, Can. Jour., vol. 4, Corniferous Gr. [Ety. proper name.]  
cayugaense, Billings, 1859, Can. Jour., vol. 4, Corniferous Gr. [Ety. proper name.]  
prolificum, Nicholson, 1874, Rep. Pal. Ont. Can., Corniferous Gr. [Sig. prolific.]  
sub-cæspitosum, Nicholson, 1874, Geo. Mag. Lond. N. S., vol. 1, Ham. Gr. [Sig. somewhat like *Cyathophyllum cæspitosum*.]  
tenuiseptum, Billings, 1859, Can. Jour., Ham. Gr. [Ety. having slender septæ.]
- HETEROPHRENTIS**, Billings, 1875, Can. Nat. & Geol. [Ety. *heteros*, irregular; *phren*, the midriff or the lamella.]  
compta, Billings, 1875, Can. Nat. & Geol., Corniferous Gr. [Sig. elegant.]  
excellens, Billings, 1875, Can. Nat. & Geol., Corniferous Gr. [Sig. excellent.]  
prolifca, Billings, 1875, Can. Nat. & Geol., Corniferous Gr. [Sig. prolific.]  
spatiosa, Billings, 1859, (Zaphrentis spatiosa) Can. Nat. & Geol., vol. 4, Onondaga & Corniferous Gr. [Sig. large.]  
*Houghtonia*, syn. for *Columnopora*.  
*huronica*, see *Columnopora huronica*.
- INOCAULIS**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *inos*, small sprouts, like the roots of herbs; *kaulos*, the stock or stem.]  
bella, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Sig. beautiful.]  
plumulosa, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. full of feathers.]
- LAMELLOPORA**, Owen, 1840, Rep. on Mineral lands. [Ety. *lamella*, a small plate; *poros*, a perforation.] This genus is a synonym for *Stromatopora*, or very closely related to it.]  
infundibularia, Owen, 1840, Rep. on Mineral lands, Devonian. [Sig. funnel-shaped.]
- LETOPORA**, Winchell, 1863, Proc. Acad. Nat. Sci. [Ety. *leptos*, shallow; *pora*, a cell.]  
typa, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Ety. the type of the genus.]
- LIMARIA**, Steininger, 1833, Bul. Soc. Geol. France. [Ety. *Limarius*, belonging to slime.]  
crassa, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. thick.]



- falcata, Prout, 1859, Trans. St. Louis Acad. Sci., Up. Held. Gr. [Sig. sickle-shaped.]
- fruticosa, Steininger, 1833, Bul. Soc. Geol. France, Niagara Gr. [Sig. full of shoots or stems.]
- laminata, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. laminated.]
- ramulosa, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. full of little branches.]
- Linipora rotunda*, one of Troost's names.
- LITHOSTROTION, Lhwyd, 1699, Lithophyl. Britann. Ichnographia. [Ety. *lithos*, stone; *strotion*, little rafter.]
- basaltiforme*, Conybeare & Phillips, 1822, as identified by Owen, 1852, see Lithostrotion canadense.
- californiense, Meek, 1864, Pal. California, Carb. [Ety. proper name.]
- canadense, Castelnau, 1843, (Axinura canadensis) Terr. Sil. Amerique, Lower Carb. [Ety. proper name.]
- mamillare*, Castelnau, syn. for Lithostrotion canadense.
- pictoense, Billings, 1868, Acad. Geol., Low. Carb. [Ety. proper name.]
- proliferum, Hall, 1858, Geo. Rep. Iowa., St. Louis Gr. [Sig. putting forth a new shoot.]
- LONSDALEIA, McCoy, 1849, Ann. & Mag. Nat. Hist., 2d ser., vol. 3. [Ety. proper name.]
- papillata, Fischer, 1837, (Cyathophyllum papillatum) Oryct. de Moscou. [Sig. covered with papilli.]
- LOPHOPHYLLUM, Edwards & Haime, 1850, Brit. Foss. Corals. [Ety. *lophos*, a ridge; *phyllon*, a plant.]
- expansum, White, 1876, Proc. Acad. Nat. Sci. Phil. Keokuk Gr. [Sig. expanded.]
- proliferum, McChesney, 1860, (Cyathaxonia prolifera) New. Pal. Foss., Coal Meas. [Sig. abundant.]
- LUNATIPORA, Winchell, 1866, Rep. Low. Peninsula Mich. [Ety. *lunatus*, crescent-formed; *poros*, a pore.]
- michiganensis, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Ety. proper name.]
- LYELLIA, Edwards & Haime, 1851, Mon. Pol. Foss. Terr. Palæoz. [Ety. proper name.]
- americana, Edwards & Haime, 1851, Mon. Pol. Foss. Terr. Palæoz., Corniferous Gr. [Ety. proper name.]
- decipiens, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. deceiving.]
- papillata, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. covered with papilli.]
- parvituba, Rominger, 1876, Pal. Foss. Corals, Niagara Gr. [Sig. small-tubed.]
- Madrepora*, Linnaeus, 1748, Syst. Nat. repens, Troost, 1840, 5th Geo. Rep. Tenn. Not satisfactorily defined.
- MEGALOGRAPTUS, S. A. Miller, 1874, Cincin'ti Quar. Jour. Sci., vol. 1. [Ety. *megale*, large; *grapho*, to write.]
- welchii, S. A. Miller, 1874, Cin'ti Quar. Jour. Sci., Cin'ti Gr. [Ety. proper name.]
- MICHELINIA, De Koninck, 1842, Descr. des Anim. Foss. Belg. [Ety. proper name.]
- clappi, Edwards & Haime, (Chonostegites clappi) Corniferous Gr. [Ety. proper name.]
- convexa, 1850, D'Orbigny, Prodr. de Palæont., Onondaga & Corniferous Gr. [Sig. convex.]
- cylindrica, Edwards & Haime, 1851, Mon. Pol. Foss., Corniferous Gr. [Sig. cylindrical.]
- favositoides, Billings, 1859, Can. Jour., vol. 4, Corniferous Gr. [Sig. like *Favosites*.]
- insignis, Rominger, 1876, Foss. Corals, Up. Held. & Ham. Gr. [Sig. remarkable.]
- intermittens, Billings, 1859, Can. Nat. & Geol., vol. 4, Corniferous Gr. [Sig. ceasing for a time.]
- lenticularis, Hall, 1874, 26th Reg. Rep. Low. Held. Gr. [Sig. lens-shaped.]
- trochiscus, Rominger, 1876, Foss. Corals, Ham. Gr. [Sig. a small round ball.]
- MICROCYLUS, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3. [Ety. *mikros*, small; *kuklos*, circle.]
- discus, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Ham. Gr. [Sig. a quoit.]
- Millepora*, Linnaeus, 1748, Syst. Nat. repens, see Alveolites repens.
- MONOGRAPTUS, Emmons, 1856, (Monograpsus) Am. Geol. [Ety. *monos*, one; *grapho*, to write.]
- elegans, Emmons, 1856, Am. Geol., Quebec Gr. [Sig. elegant.]
- rectus, Emmons, 1856, Am. Geol. Quebec Gr. [Sig. straight.]
- MONTICULIPORA, D'Orb., 1850, Prodr. de Palæont., vol. 1. [Ety. *monticulus*, a hillock; *poros*, a pore.]
- approximata, Nicholson, 1874, (Chetetes approximatus) Quar. Jour. Geol. Soc., vol. 30, Cin. Gr. [Sig. near to—from its near approach to M. dali.]
- attrita, Nicholson, 1874, (Chetetes attritus) Quar. Jour. Geol. Soc. vol. 30, Cin'ti Gr. I believe this is not a good species, but Nicholson says now that it should be called *Dekayia attrita*.
- barrandi, Nicholson, 1874, (Chetetes barrandii) Quar. Jour. Geol. Soc., vol. 30, Cin. Gr. [Ety. proper name.]
- briareus, Nicholson, 1875, (Chetetes briareus) Ohio Pal., vol. 2, Cin'ti Gr. [Ety. mythological name.]
- calculus, James, 1875, (Chetetes calicula) Int. Catal. Cin. Foss., Cin'ti Gr. [Sig. a little cup.]



- cinnatiensis, James, 1875, (*Chetetes cinnatiensis*) Int. Catal. Cin. Foss. Cin'ti Gr. [Ety. proper name.]
- clavicoides, James, 1875, (*Chetetes clavicoides*) Int. Catal. Cin. Foss., Cin'ti Gr. [Sig. club-shaped.] A very doubtful species.
- dalii, Edwards & Haime, 1851, (*Chetetes dali*) Pol. Foss. des Terr. Palæoz., Cin'ti Gr. [Ety. proper name.]
- decipiens, Rominger, 1866, (*Chetetes decipiens*) Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Sig. doubtful.]
- delicatula, Nicholson, 1874, (*Chetetes delicatulus*) Quar. Jour. Geol. Soc., vol. 30, Cin'ti Gr. [Sig. slender.]
- discoidea, Nicholson, 1875, (*Chetetes discoideus*) Ohio Pal., vol. 2, Cin'ti Gr. [Sig. disc-like.]
- fibrosa, Goldfuss, 1826, (*Calamopora fibrosa*) Germ. Petref., Cin'ti to Clinton Gr. [Sig. fibrous.]
- fletcheri, Edwards & Haime, 1851, (*Chetetes fletcheri*) Pol. Foss. des Terr. Palæoz., Cin'ti Gr. [Ety. proper name.]
- frondosa, D'Orbigny, 1850, Prodr. des Palæont., Cin'ti Gr. [Sig. branchy.]
- gracilis, Nicholson, 1874, (*Chetetes gracilis*) Quar. Jour. Geol. Soc., vol. 30, Cin'ti Gr. [Sig. slender.]
- jamesi, Nicholson, 1874, (*Chetetes jamesi*) Quar. Jour. Geol. Soc., vol. 30, Cin'ti Gr. [Ety. proper name.]
- lycoperdon, Say, 1847, (*Favosites lycoperdon*) Hall, Pal. N. Y., vol. 1, Trenton & Hudson Riv. Gr. [Sig. puff-ball-shaped.]
- mammillata, D'Orbigny, 1850, Prodr. de Palæont., Cin'ti Gr. [Sig. covered with nipples—mammillated.]
- monticula, White, 1876, Proc. Acad. Nat. Sci., Devonian. [Sig. small conical projections.]
- newberryi, Nicholson, 1875, (*Chetetes newberryi*) Ohio Pal. vol. 2, Cin'ti Gr. [Ety. proper name.]
- nodulosa, Nicholson, 1874, (*Chetetes nodulosa*) Quar. Jour. Geol. Soc., vol. 30, Cin'ti Gr. [Sig. covered with small knots.]
- o'nealli, James, 1875, (*Chetetes o'nealli*) Int. Catal. Cin. Foss., Cin'ti Gr. [Ety. proper name.]
- ortoni, Nicholson, 1874, (*Chetetes ortoni*) Quar. Jour. Geol. Soc., vol. 30, Cin'ti Gr. [Ety. proper name.]
- pavonia, D'Orbigny, 1850, (*Ptylodictya pavonia*) Prodr. de Palæont., Cin'ti Gr. [Ety. *Pavonia*, a genus of polyyps.]
- petechialis, Nicholson, 1875, (*Chetetes petechialis*) Ohio Pal., vol. 2, Cin'ti Gr. [Sig. spotted.]
- quadrata, Rominger, 1866, (*Chetetes quadratus*) Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Sig. four cornered.]
- rugosa, Hall, 1847, (*Chetetes rugosus*) Pal. N. Y., vol. 1, Cin'ti Gr. [Sig. wrinkled.]
- rugosa*, Edwards & Haime, 1851. The name was preoccupied.
- sigillarioides, Nicholson, 1875, (*Chetetes sigillarioides*) Pal. Ohio, vol. 2, Cin'ti Gr. [Ety. from its resemblance to *Sigillaria*.]
- subpulchella, Nicholson, 1875, (*Chetetes subpulchellus*) Ohio Pal., vol. 2, Cin'ti Gr. [Sig. somewhat like *M. pulchella*.]
- tuberculata, Edwards & Haime, 1851, (*Chetetes tuberculatus*) Pol. Foss. des Terr. Palæoz., Cin'ti Gr. [Sig. tuberculated.]
- NEBULIPORA, McCoy, 1850, Ann. & Mag. Nat. Hist., 2d ser., vol. 6. [Ety. *nebula*, thick-mist; *pore*, a pore.]
- papillata, McCoy, 1850, Ann. & Mag. Nat. Hist., 2d ser., vol. 6, Cin'ti Gr. [Sig. covered with papilli.]
- NEMAGRAPTUS, Emmons, (*Nemagrapsus*) 1856, Am. Geol., pt. 2. Prof. Hall uses the termination *graptus*, because *grapsus* is used in the nomenclature of crustacea. [Ety. *nema*, a thread; *grapho*, to write.]
- capillaris, Emmons, 1856, Am. Geol., pt. 2, Quebec Gr. Prof. Hall says this species is apparently part of a *Graptolithus gracilis* or of some similar species. [Sig. like a hair.]
- elegans, Emmons, 1856, Am. Geol., pt. 2, Quebec Gr. [Sig. elegant.]
- NEREOGRAPTUS, Geinitz, 1852, Die Versteinerungen der Grauwacken—formation, etc. [Ety. *Nereis*, existing annelids; *grapho*, to write.]
- deweyi, Emmons, 1856, Am. Geol., Quebec Gr. [Ety. proper name.]
- gracilis, Emmons, 1856, Am. Geol., Quebec Gr. [Sig. slender.]
- jacksoni, Emmons, 1856, Am. Geol., Quebec Gr. [Ety. proper name.]
- lanceolatus, Emmons, 1856, Am. Geol., Quebec Gr. [Sig. lanceolate.]
- loomisi, Emmons, 1856, Am. Geol., Quebec Gr. [Ety. proper name.]
- pugnis, Emmons, 1856, Am. Geol., Quebec Gr. [Sig. a fist.]
- robustus, Emmons, 1856, Am. Geol., Quebec Gr. [Sig. robust.]
- OLDHAMIA, Forbes, 1850, Dublin Geo. Jour. [Ety. proper name.]
- antiqua, Forbes, 1850, Dublin Geo. Jour., Potsdam Gr. [Sig. ancient.]
- fruticosa, Hall, 1865, Can. Org. Rem., Decade 2, Trenton Gr. [Sig. branchy.]
- OMPHYMA, Rafinesque, 1820, Ann. des Sci. Phys. de Bruxelles, vol. 5. [Ety. *omphax*, (?) a precious stone.]
- congregata, Billings, 1866, Catal. Sil. Foss. Antic., Clinton and Niagara Gr. [Sig. congregated together.]
- drummondii, Billings, 1866, Catal. Sil. Foss. Antic., Clinton & Niagara Gr. [Ety. proper name.]

- stokesi, M. Edwards, (Ptychophyllum stokesi) as identified by Rominger, 1876, Foss. Corals, Niagara Gr. [Ety. proper name.]
- verrucosa, Edwards & Haime, 1851, Mon. Pol. Foss. Terr. Palaeoz., Niagara Gr. [Sig. warty.]
- PACHYPHYLLUM, Edwards & Haime, 1850, Brit. Foss. Corals. [Ety. *pachys*, thick; *phyllon*, a leaf.]
- solitarium, Hall, 1873, 23d Reg. Rep. Chemung Gr. [Sig. alone, solitary.]
- woodmani, White, 1870, (Smithia woodmani) Geo. Rep. Iowa, vol. 1, Ham. Gr. [Ety. proper name.]
- PALÆOCYCLUS, Edwards & Haime, 1849, Polypters Fossiles. [Ety. *palaaios*, ancient; *kuklos*, a circle.]
- kirbyi, Meek, 1868, Trans. Chi. Acad. Sci., Devonian. [Ety. proper name.]
- PALÆOPHYLLUM, Billings, 1858, Rep. of Progr. Can. Sur. [Ety. *palaaios*, ancient; *phyllon*, a leaf.]
- divaricans, Nicholson, 1875, Pal. Ohio, vol. 2, Cin'ti Gr. [Sig. wide-apart.]
- rugosum, Billings, 1858, Rep. of Progr., Trenton Gr. [Sig. wrinkled.]
- Palaeotrochis*, Emmons, 1856, Geo. Rep. Midland counties of North Carolina. This form Prof. Hall, and later Prof. Marsh, ascertained to be a peculiar concretion.
- major*, Emmons. A concretion.
- minor*, Emmons. A concretion.
- PETRAIA, Munster, 1839, Beitrage zur Petrefactenkunde, etc. [Ety. *petraios*, that grows among rocks.] Streptelasma is regarded by some as a sub-genus and by others as a synonym.
- angulata, Billings, 1862, Pal. Foss., vol. 1, Hud. Riv. Gr. [Sig. angular.]
- aperta, Billings, 1862, Pal. Foss., vol. 1, Black Riv. Gr. [Sig. standing open.]
- fanningana, Safford, 1869, Geo. of Tenn., Low. Held. Gr. [Ety. proper name.]
- forresteri, Honeyman, 1868, Acadian Geology. Catalogue name.
- latuscula, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Sig. a little waist.]
- logani, Nicholson, 1875, Can. Nat. & Geo., Corniferous Gr. [Ety. proper name.]
- minganensis, see Archeocyathus minganensis.
- ottawaensis, Billings, 1865, Can. Nat. & Geo., 2d series, vol. 2, Trenton Gr. [Ety. proper name.]
- pygmaea, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Sig. diminutive in size.]
- pulchella, Billings, 1865, Can. Nat. & Geo., 2d series, vol. 2, Mid. Sil. [Sig. lovely, very pretty.]
- rustica, Billings, 1858, Rep. of Progr., Hud. Riv. Gr. [Sig. rustic, uncouth.]
- selecta, Billings, 1865, Can. Nat. & Geo., 2d series, vol. 2, Mid. Sil. [Sig. select, choice.]
- waynensis, Safford, 1869, Geo. of Tenn., Low. Held. Gr. [Ety. proper name.]
- PHILLIPSASTREA, D'Orbigny, 1849, Note Sur des Polypters Fossiles. [Ety. proper name; *astrea*, from *aster*, a star.]
- affinis, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Sig. adjoining.]
- gigas, Owen, 1840, (Astræa gigas) Rep. on Mineral lands, Devonian. [Sig. large.]
- mammillaris, Owen, 1840, (Astræa mammillaris) Rep. on Mineral lands, Devonian. [Sig. mammillated.]
- verneuili, Edwards & Haime, 1850, Polypters Foss. des Terr., Ham. Gr. [Ety. proper name.]
- yandelli, Rominger, 1876, Foss. Corals, Up. Held. Gr. [Ety. proper name.]
- PHYLLOGRAPTUS, Hall, 1858, Rep. of Progr. Can. Sur. [Ety. *phyllon*, a leaf; *grapho*, to write.]
- angustifolius, Hall, 1858, Rep. of Progr. Can. Sur., Quebec Gr. [Sig. narrow-leaved.]
- anna, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Ety. proper name.]
- ilicifolius, Hall, 1858, Rep. of Progr. Can. Sur., Quebec Gr. [Sig. oak-leaved.]
- loringi, White, 1874, Rep. Invertebrate Foss., Quebec Gr. [Ety. proper name.]
- similis, Hall, 1858, Can. Nat. & Geo., vol. 4, Quebec Gr. [Sig. similar.]
- typus, Hall, 1858, Rep. of Progr. Can. Sur., Quebec Gr. [Ety. type of the genus.]
- PLASMOPORE, Edwards & Haime, 1849, Comptes rend., t. 29. [Ety. *plasma*, a cast; *poros*, a pore.]
- foliis, Edwards & Haime, 1850, Mon. Pol. Foss., Niagara Gr. [Sig. a bag of leather.]
- PLEURODICTYUM, Goldfuss, 1826, Petref. Germ., vol. 1. [Ety. *pleura*, side; *dictyon*, a net.]
- problematicum, Goldfuss, 1826, Petref. Germ., vol. 1, Onondaga Gr. [Sig. doubtful.]
- PLUMALINA, Hall, 1858, Can. Nat. & Geo., vol. 3. [Sig. like a feather.]
- gracilis, Shumard, 1855, (Filicites gracilis) Geo. Rep. Mo., Lithographic Gr. [Sig. slender.]
- plumaria, Hall, 1843, (Filicites ?) Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. plume-like.]
- Polydasma*, Hall, 1852, Pal. N. Y., vol. 2, syn. for Zaphrentis.
- turbinatum*, see Zaphrentis turbinata.
- PORITES, Lamarck, 1816, Hist. des Anim. sans Vert. [Ety. *poros*, a pore.]
- astraciformis*, Owen, 1840, Rep. on Mineral lands, Devonian. This may be the same species subsequently described as Pachyphyllum woodmani.
- pyriformis*, as identified by d'Archiac & Verneuili. Not American.
- vetustus*, see Protarea vetusta.
- Prionotus*, Hisinger, Leth. Suec.
- folium*, see Diplograptus folium.
- pristis*, see Diplograptus pristis.

- PROTAREA**, Edwards & Haime, 1849, Pol. Foss. des Terr. Palæoz. [Ety. *protos*, first, formerly; *arios*, porous, spongy.]  
*vetusta*, Hall, 1847, (Porites *vetusta*) Pal. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Sig. ancient.]  
*verneuili*, Edwards & Haime, 1851, Pol. Foss. des Ter. Palæoz., Silurian. (?) [Ety. proper name.]  
**PTILOGRAPTUS**, Hall, 1865, Can. Org. Rem., Decade 2. [Ety. *ptilon*, a feather; *grapho*, to write.]  
*geinitzianus*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Ety. proper name.]  
*plumosus*, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Sig. plume-like.]  
**PTYCHOPHYLLUM**, Lonsdale, 1839, Sil. Syst. [Ety. *ptyche*, a ridge or wrinkle; *phylon*, a plant.]  
*canadense*, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Ety. proper name.]  
*stokesi*, Edwards & Haime, 1851, Mon. Pol. Foss. des Terr. Palæoz., Niagara Gr. [Ety. proper name.]  
**QUENSTEDTIA**, Rominger, 1876, Foss. Corals. [Ety. proper name.]  
*cornuta*, Billings, 1859, (Aulopora *cornuta*) Can. Jour., vol. 4, Corniferous Gr. [Sig. horned.]  
*niagarensis*, Rominger, 1876, Foss. Corals, Niagara Gr. [Ety. proper name.]  
*umbellifera*, Billings, 1859, (Aulopora *umbellifera*) Can. Jour., vol. 4, Corniferous Gr. [Sig. umbrella-bearing.]  
**RASTRITES**, Barrande, 1850, Graptolites de Boheme. [Sig. a rake.]  
*barrandi*, Hall, 1859, Pal. N. Y., vol. 3, Hud. Riv. Gr. [Ety. proper name.]  
 This may be only part of *Graptolithus gracilis*.  
**RETIAGRAPTUS**, Suess, 1851, Ueber Bomischen Graptolithen. [Ety. *rete*, a net; *grapho*, to write.]  
*barrandi*, Hall, 1860, 13th Reg. Rep., Hud. Riv. Gr. [Ety. proper name.]  
*eucharis*, Hall, 1865, Can. Org. Rem., Decade 2, Utica slate. [Sig. very graceful.]  
*geinitzianus*, Hall, 1859, Pal. N. Y., vol. 3, Hud. Riv. Gr. [Ety. proper name.]  
*tentaculatus*, Hall, 1858, (Graptolithus *tentaculatus*) Rep. of Progr. Can. Sur., Quebec Gr. [Sig. having feelers.]  
**RETIOLITES**, Barrande, 1850, Graptolites de Boheme. [Ety. *rete*, a net; *lithos*, stone.]  
*ensiformis*, Hall, 1858, (Graptolithus *ensiformis*) Rep. of Progr. Can. Sur., Quebec Gr. [Sig. sword-shaped.]  
*venosus*, Hall, 1852, (Graptolithus *venosus*) Pal. N. Y., vol. 2, Clinton Gr. [Sig. reticulated or venose.]  
**RHOMBOPORA**, Meek, 1872, Pal. Eastern Nebraska. [Ety. *rhombus*, a rhomb; *pore*, a pore.]  
*lepidodendroidea*, Meek, 1872, Pal. Eastern Nebraska, Upper Coal Meas. [Sig. like the *Lepidodendron*.]  
**SARCINULA**, Linnæus, 1816, Hist. des Animaux. Vert. [Ety. *sarcinula*, a little bundle.]  
*glabra*, Owen, 1840, Rep. on Mineral lands, Devonian. [Sig. smooth.]  
 (?) *obsoleta*, Hall, 1857, Geo. Lake Sup. Land Dist., vol. 2, Hud. Riv. Gr. [Sig. obsolete.]  
*ramosa*, Eaton, 1832, Geo. Text Book, (?) Gr. [Sig. full of branches.]  
**SMITHIA**, Edwards & Haime, 1851, Pol. Foss. des Terr. Palæoz. [Ety. proper name.] This name was preoccupied for a genus in Botany.  
*johanna*, Hall, 1873, 23d Reg. Rep., Chemung Gr. [Ety. proper name.]  
*multiradiata*, Hall, 1873, 23d Reg. Rep., Chemung Gr. [Sig. many-rayed.]  
*woodmani*, see *Pachyphyllum woodmani*.  
*verrilli*, Meek, 1868, Trans. Chi. Acad. Sci., Devonian. [Ety. proper name.]  
**SPHÆROLITES**, Hinde, 1875, Proc. Geo. Soc. Lond. [Ety. from forming a spheroidal body.]  
*nicholsoni*, Hinde, 1875, Proc. Geo. Soc. Lond., Low. Held. Gr. [Ety. proper name.]  
**STAUROGRAPTUS**, Emmons, 1856, (Staurograptus) Am. Geol., pt. 2. The termination *graptus*, is used because *graptus* is in use in the nomenclature of crustacea, [Ety. *stauros*, a cross; *grapho*, to write.]  
*dichotomus*, Emmons, 1856, Am. Geol., Quebec Gr. [Sig. divided in two parts.]  
**STELIPIORA**, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *stella*, a star; *pore*, pore.]  
*antheloidea*, Hall, 1847, Pal. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Sig. like a coral of the genus *Anthelia*.]  
**STENOPORA**, Lonsdale, 1845, Geol. Russ. & Ural. Mts., vol. 1. [Ety. *stenos*, narrow; *poros*, a pore.] Most of the species placed in this genus belong to *Monticulipora*.  
*bulbosa*, Billings, 1865, Can. Nat. & Geo., 2d series, vol. 2, Mid. Sil. [Sig. bulbous.]  
*adherens*, Billings, 1859, Can. Nat. & Geo., vol. 4, Chazy Gr. [Sig. adhering.]  
*columnaris*, Geinitz, 1866, Carb. und Dyas. in Neb., Coal Meas. [Sig. columnar.]  
*crassa*, Lonsdale, 1845, Geo. Rus., vol. 1, Coal Meas. [Sig. thick.]  
*fibrosa*, see *Monticulipora fibrosa*.  
*exilis*, Dawson, 1868, Acad. Geol., Low. Carb. [Sig. slender.]  
*huronensis*, Billings, 1865, Pal. Foss., vol. 1, Hudson River Gr. [Ety. proper name.]  
*libana*, Safford, 1869, Geo. of Tenn. Not defined.  
*patula*, Billings, 1859, Can. Nat. & Geo., vol. 4, Chazy Gr. [Sig. broad.]

- spinigera, Lonsdale, 1845, Geo. Rus., vol. 1, Coal Meas. [Sig. bearing-spines.]
- STREPTELASMA, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *streptos*, twisted; *elasma*, lamella.]
- calyculus, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. a little cup.]
- conulus, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. a little cone.]
- corniculum, Hall, 1847, Pal. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Sig. a little horn.]
- crassum, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. thick.]
- expansum, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. [Sig. expanded.]
- minimum, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. smallest.]
- multilamellosum, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. having many lamellæ.]
- parvulum, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. small.]
- patulum, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. standing open.]
- profundum, Conrad, 1843, Proc. Acad. Nat. Sci., (Cyathophyllum profundum) Black Riv. & Trenton Grs. Was this name preoccupied by Germar in 1840? [Sig. deep.]
- profunda*, Hall, 1847, Pal. N. Y., vol. 1, Birdseye & Black Riv. Grs. If, as some claim, Streptelasma is a synonym for Petraia then this name was preoccupied by Germar in 1840, as well as by Conrad in 1843.
- radicans, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. a root.]
- rectum, Hall, 1843, (Strombodes rectus) Geo. Rep., 4th Dist. N. Y., Ham. Gr. [Sig. straight.]
- spongiaxis, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. from the sponge-like axis.]
- strictum, Hall, 1874, 26th Reg. Rep., Niagara Gr. [Sig. narrow, close.]
- STRIATOPORA, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *striatus*, striated; *pore*, a pore.]
- carbonaria, White, 1862, Proc. Bost. Soc., Nat. Hist., vol. 9, Burlington Gr. [Sig. pertaining to coal.]
- cavernosa, Rominger, 1876, Foss. Corals, Corniferous Gr. [Sig. full of cavities.]
- flexuosa, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. bent.]
- huronensis, Rominger, 1876, Foss. Corals, Niagara Gr. [Ety. proper name.]
- iowensis, Owen, 1840, (Cyathopora iowensis) Rep. on Min. lands of Iowa, etc., Ham. Gr. [Ety. proper name.]
- issa, Hall, 1874, 26th Reg. Rep. Low. Held. Gr. [Ety. proper name.]
- linneana, Billings, 1859, Can. Jour., Ham. Gr. [Ety. proper name.]
- missouriensis, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Low. Held. Gr. [Ety. proper name.]
- rugosa*, Hall, 1858, Geo. of Iowa, Ham. Gr. [Sig. wrinkled.] Syn. for *Striatopora iowensis*.
- STROMATOCERIUM, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *stroma*, layer; *kerion*, a honeycomb.]
- rugosum, Hall, 1847, Pal. N. Y., vol. 1, Birdseye & Black River Gr. [Sig. wrinkled.]
- STROMATOPORA, Goldfuss, 1826, Germ. Petref. [Ety. *stroma*, stratum; *poros*, a pore.] This genus is regarded by some authors as a sponge.
- alternata, Hall, 1873, 23rd Reg. Rep., Chemung Gr. [Sig. alternating.]
- cæspitosa, Winchell, 1866, Rep. Low. Penin. Mich., Ham. Gr. [Sig. turf-like.]
- compacta, Billings, 1862, Pal. Foss., vol. 1, Black River Gr. [Sig. compact.]
- concentrica, Goldfuss, 1826, Germ. Petref., Niagara Gr. [Sig. concentric.]
- constellata, Hall, 1852, Pal. N. Y., vol. 2, Coralline limestone. [Sig. starry.]
- erratica, Hall, 1873, 23d Reg. Rep., Chemung Gr. [Sig. erratic.]
- expansa, Hall, 1873, 23d Reg. Rep., Chemung Gr. [Sig. expanded.]
- granulata, Nicholson, 1873, Ann. & Mag. Nat. Hist., 4th series, vol. 12, Corniferous Gr. [Sig. granulated.]
- hindi, Nicholson, 1874, Ann. & Mag. Nat. Hist., 4th series, vol. 13. [Ety. proper name.]
- incrustans, Hall, 1873, 23d Reg. Rep., Chemung Gr. [Sig. incrusting.]
- mammillata, Nicholson, 1873, Ann. & Mag. Nat. Hist., 4th series, vol. 12, Corniferous Gr. [Sig. mammillated.]
- monticulifera, Winchell, 1866, Rep. Low. Penin. Mich., Ham. Gr. [Sig. bearing conical projections.]
- nodulata, Nicholson, 1875, Ohio Pal., vol. 2, Corniferous Gr. [Sig. from the elevations that cover it.]
- nux, Winchell, 1866, Rep. Low. Penin. Mich., Ham. Gr. [Sig. a nut.]
- ostiolata, Nicholson, 1873, Ann. & Mag. Nat. Hist. 4th ser., vol. 12, Guelph Gr. [Sig. a little door.]
- perforata, Nicholson, 1874, Ann. & Mag. Nat. Hist., 4th ser., vol. 13, Corniferous Gr. [Sig. perforated.]
- ponderosa, Nicholson, 1875, Ohio Pal. vol. 2, Corniferous Gr. [Sig. from its ponderous appearance.]
- pustulifera, Winchell, 1866, Rep. Low. Penin. Mich., Ham. Gr. [Sig. bearing pustules.]
- pustulosa*, Safford. Not defined.
- solidula, Hall, 1873, 23rd Reg. Rep., Chemung Gr. [Sig. solid.]
- substriatella, Nicholson, 1875, Ohio Pal., vol. 2, Corniferous Gr. [Sig. somewhat finely striated.]
- tuberculata, Nicholson, 1873, Ann. & Mag. Nat. Hist., 4th ser., vol. 12, Corniferous Gr. [Sig. tuberculated.]

- verrucosa, Troost, 1840, 5th Geo. Rep. Tenn., Devonian. [Sig. warty.]
- STROMBODES, Schweigger, 1820, Handb. der Naturg. [Ety. *strombos*, twisting; in allusion to the lamellæ spirally twisting about the center.]
- alpenensis, Rominger, 1876, Foss. Corals, Ham. Gr. [Ety. proper name.] Is this a syn. for *Phillipsastrea mammillaris*?
- diffuens, Edwards & Haime, 1851, Pol. Foss. des Terr. Palæoz., Anticosti Gr. [Sig. flowing in different directions.]
- distortus, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Ham. Gr. [Sig. distorted, irregular in shape.]
- eximius, Billings, 1866, Catal. Sil. Foss., Antic., Clinton & Niagara Gr. [Sig. uncommon, excellent.]
- gracilis, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Sig. slender.]
- helianthoides*, (?) *Heliophyllum halli*.
- mammillatus, Owen, as defined by Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. mammillated.]
- pentagonus, Goldfuss, 1826, Germ. Petref. Niagara Gr. [Sig. pentagonal.]
- pygmaeus, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. dwarfed.]
- (?) *rectus*, see *Streptelasma rectum*.
- simplex*, see *Zaphrentis simplex*.
- striatus, D'Orbigny, Niagara Gr. [Sig. striated.]
- vermicularis, Lonsdale, 1849, Trans. Geo. Soc., vol. 5, Devonian. [Sig. vermicular.]
- SYRINGOPORA, Goldfuss, 1826, Germ. Petref. [Ety. *syrinx*, a pipe; *pora*, a pore.]
- alectiformis, Winchell, 1866, Rep. Low. Penin. Mich., Ham. Gr. [Ety. like a coral of the genus *Alecto*.]
- annulata, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. ringed.]
- cleviana, Edwards & Haime, 1851, Polyp. Foss., Corniferous Gr. [Ety. proper name.]
- compacta, Billings, 1858, Can. Nat. & Geo., vol. 3, Upp. Sil. [Sig. compact.]
- crassata, Winchell, 1866, Rep. Low. Penin. Mich., Ham. Gr. [Sig. thick; in allusion to the thickness of the tube walls.]
- dalmani, Billings, 1858, Can. Nat. & Geo., vol. 3, Upp. Sil. [Ety. proper name.]
- debilis, Billings, 1858, Can. Nat. & Geo., vol. 3, Upp. Sil. [Sig. weak, feeble.]
- elegans, Billings, 1858, Can. Nat. & Geo., vol. 3, Corniferous Gr. [Sig. elegant.]
- fenestrata, Winchell, 1866, Rep. Low. Penin. Mich., Ham. Gr. [Sig. reticulated.]
- fibrata, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. fibrous.]
- harveyi, White, 1862, Proc. Bost. Soc. Nat. Hist. vol. 9, Chemung Gr. [Ety. proper name.]
- hisingeri, Billings, 1858, Can. Nat. & Geo., vol. 4, Corniferous Gr. [Ety. proper name.]
- intermedia, Nicholson, 1874, Rep. Pal. Prov. Ont., Can., Devonian. [Sig. intermediate.]
- laxata, Billings, 1859, Can. Jour., vol. 4, Corniferous Gr. [Sig. loose.]
- macluri, Billings, 1860, Can. Jour., vol. 5, Corniferous Gr. [Ety. proper name.]
- multattenuata, McChesney, 1860, New Pal. Foss., Coal Meas. [Ety. *multum*, much; *attenuatus*, slender.]
- multicaulis, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. having many stems.]
- nobilis, Billings, 1858, Can. Nat. & Geo., vol. 4, Corniferous Gr. [Sig. remarkable.]
- perelegans, Billings, 1859, Can. Jour., vol. 4, Corniferous Gr. [Sig. very elegant.]
- retiformis, Billings, 1858, Can. Nat. & Geo., vol. 3, Upp. Sil. [Sig. net-formed.]
- reticulata, Goldfuss, 1826, Petref. Germ., Devonian. [Sig. reticulated.]
- tabulata, Edwards & Haime, 1851, Pol. Foss. Terr. Palæoz., Up. Held. Gr. [Sig. tabulated.]
- tenella, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. delicate.]
- tubiporoides, Yandell & Shumard, 1847, Contributions to Geo. of Ky., Corniferous Gr. [Ety. resembling corals of the genus *Tubipora*.]
- tubiporoides*, Billings. The name was preoccupied in 1847.
- verneuli, Edwards & Haime, 1851, Polyp. Foss., Corniferous Gr. [Ety. proper name.]
- verticillata, Goldfuss, 1826, Petref. Germ., Up. Sil. [Sig. verticillate, whorled.]
- SYRINGOSTROMA, Nicholson, 1875, Ohio Pal., vol. 2. [Ety. *syrinx*, a pipe; *stroma*, a layer.]
- columnare, Nicholson, 1875, Ohio Pal., vol. 2, Corniferous Gr. [Sig. columnar.]
- densum, Nicholson, 1875, Ohio Pal., vol. 2, Corniferous Gr. [Ety. from the apparently dense calcareous structure.]
- TETRADIDIUM, Dana, 1846, Zooph., vol. 8. [Ety. *tetras*, four.]
- columnare, Hall, 1847, (Chetetes columnaris) Pal. N. Y., vol. 1, Trenton Gr. [Sig. columnar.]
- fibratum, Safford, 1856, Am. Jour. Sci., vol. 22, Cin'ti Gr. [Sig. threaded.]
- fibratum *var. apertum*, Safford, 1856, Am. Jour. Sci., vol. 22, Cin'ti Gr. [Sig. open.]
- fibratum *var. minus*, Safford, 1856, Am. Jour. Sci. & Arts, vol. 22, Cin'ti Gr. [Sig. less.]
- TETRAGRAPTUS, Salter, 1863, Quar. Jour. Geo. Soc., vol. 19. [Ety. *tetras*, four; *grapho*, to write]. Prof. Hall does not regard this sub-genus of Graptolithus, considering the present knowledge of the subject, with much favor. *G. bryonoides* is made the typical species. *G. quadribrachiatus*, also placed in it.

- approximatus, Nicholson, 1873, Ann. Mag. Nat. Hist., 4th series, vol. 12, Quebec Gr. [Sig. near to.]
- THAMNOGRAPTUS, Hall, 1859, Pal. N. Y., vol. 3. [Ety. *thamnus*, a shrub; *grapho*, to write.]
- anna, Hall, 1865, Can. Org. Rem., Decade 2, Quebec Gr. [Ety. proper name.]
- capillaris, Hall, 1859, Pal. N. Y., vol. 3, Hud. Riv. Gr. [Sig. hair-like.]
- typus, Hall, 1859, Pal. N. Y., vol. 3, Hud. Riv. Gr. [Ety. type of the genus.]
- THECIA, Edwards & Haime, 1849, Comptes rend., t. 29. [Ety. proper name. (?)]
- major, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. large.]
- minor, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. less.]
- ramosa, Rominger, 1876, Foss. Corals, Up. Held. Gr. [Sig. branching.]
- swinderniana, Goldfuss, 1826, (*Agaricia swinderniana*) Petref. Germ., Niagara Gr. [Ety. proper name.]
- THECOSTEGITES, Edwards & Haime, 1849, Comptes rend., t. 29. [Ety. *theke*, a sheath; *steges*, a covering.]
- bouchardi, Edwards & Haime, 1854, Brit. Foss. Corals, Up. Held. Gr. [Ety. proper name.]
- hemisphaericus, Roemer, 1860, Sil. Fauna. West Tenn., Niagara Gr. [Sig. hemispherical.]
- TRACHYPORA, Edwards & Haime, 1851, Pol. Foss. Terr. Palaeoz., Up. Held. Gr. [Ety. *trachys*, rough; *poros*, a pore.]
- elegantula, Billings, 1859, Can. Jour., Ham. Gr. [Sig. beautiful.]
- TUBIPORA, Lamarck, 1815, Hist. des Animaux Verteb. [Ety. *tubus*, a tube; *porus*, a pore.]
- lamellosa, Owen, 1840, Rep. on Mineral lands, Devonian. [Sig. in very thin plates.]
- VERMIPORA, Hall, 1874, 26th Reg. Rep. [Ety. *vermis*, a worm; *pore*, a pore.]
- serpuloides, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. like the *Serpula*.]
- fasciculata, Rominger, 1876, Foss. Corals, Ham. Gr. [Sig. bundled.]
- niagarensis, Rominger, 1876, Foss. Corals, Niagara Gr. [Ety. proper name.]
- VESICULARIA, Rominger, 1876, Foss. Corals. [Ety. *vesicularia*, from the vesiculose structure.]
- major, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. large.]
- minor, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. less.]
- variolosa, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. full of cell pits.]
- ZAPHRENTIS, Rafinesque, 1820, Ann. des Sci. Phys. Brux., vol. 5. [Ety. *za*, very; *phrentis*, a diaphragm.]
- affinis, Billings, 1865, Can. Nat. & Geo., 2d series, vol. 2, Mid. Sil. [Sig. contiguous.]
- bellistriata, Billings, 1865, Can. Nat. & Geo., 2d series, vol. 2, Hud. Riv. Gr. [Sig. beautifully striated.]
- biggsbyi, Billings, 1866, Catal. Sil. Foss., Antic., Clinton & Niagara Gr. [Ety. proper name.]
- bilateralis, Hall, 1852, (*Caninia bilateralis*) Pal. N. Y., vol. 2, Clinton & Niagara Gr. [Sig. two-sided.]
- canadensis, Billings, 1862, Pal. Foss., vol. 1, Hud. Riv. Gr. [Ety. proper name.]
- celator, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. a concealer.]
- cinctosa, Billings, 1866, Catal. Sil. Foss., Antic., Clinton & Niagara Gr. [Sig. full of circles or belts.]
- cingulosa, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Sig. circled with lines.]
- compressa, Rominger, 1876, Foss. Corals, Up. Held. Gr. [Sig. compressed.]
- conigera, Rominger, 1876, Foss. Corals, Up. Held. Gr. [Sig. cone-bearing.]
- corniculum, Edwards & Haime, 1851, Pol. Foss. Terr. Palaeoz., Up. Held. Gr. [Sig. a little horn.]
- corticata, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Sig. coated.]
- cystica, Winchell, 1866, Rep. Low. Penin. Mich., Ham. Gr. [Sig. like a pouch.]
- edwardsi, Nicholson, 1875, Ohio Pal., vol. 2, Corniferous Gr. [Ety. proper name.]
- egeria, Billings, 1875, Can. Nat. & Geo., Corniferous Gr. [Ety. mythological name.]
- elliptica, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. elliptical.]
- eriphyle, Billings, 1875, Can. Nat. & Geo., Corniferous Gr. [Ety. mythological name.]
- fenestrata, Nicholson, 1875, Can. Nat. & Geo., Corniferous Gr. [Sig. full of openings.]
- gigantea, Rafinesque, 1820, as identified by Edwards & Haime, 1851, Polyp. Foss., Corniferous Gr. [Sig. very large.]
- glans, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. an acorn.]
- gregaria, Rominger, 1876, Foss. Corals, Niagara Gr. [Sig. in flocks.]
- hecuba, Billings, 1875, Can. Nat. & Geo., Corniferous Gr. [Ety. mythological name.]
- ida, Winchell, 1863, Proc. Acad. Nat. Sci., Lithographic limestone. [Ety. proper name.]
- incondita, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Sig. confused.]
- invenusta, Billings, 1875, Can. Nat. & Geo., Corniferous Gr. [Sig. not elegant.]
- macfarlani, Meek, 1868, Trans. Chi. Acad. Sci., Devonian. [Ety. proper name.]
- minas, Dawson, 1868, Acad. Geo. Low. Carb. [Sig. proper name.]

multilamella, Hall, 1852, Stans. Ex. to Gt. Salt Lake, Coal Meas. [Sig. many lamellæ.]  
*multilamellata*, Nicholson, 1875, Ohio Pal., vol. 2, Corniferous Gr. Preoccupied above.  
*nodulosa*, Rominger, 1876, Foss. Corals, Corniferous Gr. [Sig. full of knots.]  
*patens*, Billings, 1865, Can. Nat. & Geo., 2d ser., vol. 2, Mid. Sil. [Sig. spreading.]  
*prolifera*, Billings, 1859, Can. Nat. & Geo., vol. 4, Corniferous Gr. [Sig. prolific.]  
*recta*, Meek, 1868, Trans. Chi. Acad. Sci., Devonian. [Sig. straight.]  
*rugatula*, Billings, 1874, Pal. Foss., vol. 2, Up. Sil. [Sig. covered with little wrinkles.]  
*simplex*, Hall, 1843, (Strombodes simplex) Geo. Rep., 4th Dist. N. Y., Ham. Gr. [Sig. simple.]  
*solida*, Hall, 1873, 23d Reg. Rep., Chemung Gr. [Sig. solid.]  
*spatiosa*, see *Heterophrentis spatiosa*.  
*spinulifera*, Hall, 1858, Geo. Sur. Iowa,

Warsaw Gr. [Sig. bearing little spines.]  
*spinulosa*, Edwards & Haime, 1851, Pol. Foss. Terr. Palæoz., Low. Carb. [Sig. covered with spines.]  
*stansburyi*, Hall, 1852, Stans. Ex. to Gt. Salt Lake, Coal Meas. [Ety. proper name.]  
*stokesi*, Edwards & Haime, 1851, Pol. Foss. Terr. Palæoz., Niagara Gr. [Ety. proper name.]  
*subrecta*, Billings, 1875, Can. Nat. & Geo., Corniferous Gr. [Sig. somewhat like *Z. recta*.]  
*traversensis*, Winchell, 1866, Rep. Low. Penin. Mich., Ham. Gr. [Ety. proper name.]  
*turbinata*, Hall, 1852, (Polydidasma turbinatum) Pal. N. Y., vol. 2, Niagara Gr. [Sig. top-shaped.]  
*umbonata*, Rominger, 1876, Foss. Corals, Ham. Gr. [Sig. protuberant.]  
*ungula*, Rominger, 1876, Foss. Corals, Up. Held. Gr. [Sig. a talon.]  
*wortheni*, Nicholson, 1875, Ohio Pal., vol. 2, Corniferous Gr. [Ety. proper name.]

## CORRIGENDA.

*Brachiospongia*, page 42, read, [Ety. *brachium*, an arm.]  
*Cnemidium trentonensis*, page 43, read, *C. trentonense*.  
*Receptaculites infundibulus*, page 44, read, *R. infundibulum*.  
*Aulopora saxivada*, page 47, read, *A. saxivada*. [Sig. creeping over stone.]  
*Axophyllum rudis*, page 47, read, *A. rude*.  
*Campophyllum*, page 48, read, [Ety. *kampto*, to bend.]  
*Chonophyllum*, page 48, read, [Sig. *chonos*, a funnel.]  
*Chonograptus*, page 48, read, *Clonograptus*. [Ety. *klon*, a twig.]  
*Cladopora lichenoides*, page 49, read, *C. lichenoides*.  
*Cyathophyllum juvenis*, page 50, read, *C. juvene*.

*Cyathophyllum maritima*, page 51, read, *C. maritimum*.  
*Dictyonema fenestrata*, page 51, read, *D. fenestratum*.  
*Dictyonema gracilis*, page 51, read, *D. gracile*.  
*Dictyonema grandis*, page 51, read, *D. grande*.  
*Dictyonema irregularis*, page 51, read, *D. irregulare*.  
*Dictyonema, quadrangularis*, page 51, read, *D. quadrangulare*.  
*Dictyonema retiformis*, page 51, read, *D. retiforme*.  
*Dictyonema robusta*, page 51, read, *D. robustum*.  
*Dictyostroma undulata*, page 52, read, *D. undulatum*.  
*Favosites pleurodictyoides*, page 54, read, *F. pleurodictyoides*.  
*Halysites catenulatus*, page 56, read, [Ety. *catenula*, a little chain.]  
*Leptopora typa*, page 56, read, *L. typus*.



# ECHINODERMATA.

## ORDER CRINOIDEA.

**FAMILY CYATHOCRINIDÆ.**—Agassizocrinus, Anomalocrinus, Barycrinus, Belemnocrinus, Bursacrinus, Carabocrinus, Catilloocrinus, Cleiocrinus, Closteroocrinus, Coccoocrinus, Coeliocrinus, Cotyledonocrinus, Ctenocrinus, Cyathocrinus, Dendroocrinus, Dichoocrinus, Erisocrinus, Eucalyptocrinus, Eupachycrinus, Forbesocrinus, Glyptaster, Glyptocrinus, Graphiocrinus, Hadloocrinus, Haploocrinus, Heterocrinus, Homocrinus, Hybocrinus, Ichthyocrinus, Lecanocrinus, Macrostyloocrinus, Mariacrinus, Myelodactylus, Myrtilloocrinus, Nipteroocrinus, Onychocrinus, Pachycrinus, Palæocrinus, Platocrinus, Porocrinus, Poteriocrinus, Pterotoocrinus, Retiocrinus, Rhodocrinus, Scaphiocrinus, Schizocrinus, Scyphocrinus, Stephanocrinus, Synbathocrinus, Taxocrinus, Technocrinus, Thysanocrinus, Zeacrinus.

**FAMILY ACTINOCRINIDÆ.**—Acroocrinus, Actinoocrinus, Agaricoocrinus, Alloprosallocrinus, Amphorocrinus, Batocrinus, Celocrinus, Coronocrinus, Dolatoocrinus, Dorycrinus, Eretmocrinus, Gilbertsocrinus, Goniasteroidocrinus, Hadroocrinus, Lampteroocrinus, Lyriocrinus, Megistocrinus, Melocrinus, Mespilocrinus, Physetocrinus, Pygo-rhynchus, (?) Saccocrinus, Steganocrinus, Strotocrinus, Vasocrinus.

**FAMILY CALCEOCRINIDÆ.**—Calceocrinus.

**FAMILY ANCYROCRINIDÆ.** (?)—Ancyroocrinus.

**FAMILY EDRIOCRINIDÆ.** (?)—Aspidocrinus, Edriocrinus.

**FAMILY BRACHIOCRINIDÆ.** (?)—Brachiocrinus, Syringocrinus. (?)

## ORDER PERISCHO-ECHINOIDEA.

**FAMILY PALÆCHINIDÆ.**—Lepidechinus, Lepidesthes, Melonites, Oligoporus, Palæchinus.

**FAMILY ARCHÆOCIDARIDÆ.**—Archæocidaris, Eocidaris, Lepidocidaris, Pholidocidaris.

**ORDER CYSTOIDEA.**—Amygdalocystites, Anomalocystites, Apiocystites, Ateleocystites, Callocystites, Caryocrinus, Codaster, Comarocystites, Crinocystites, Cyclocystoides, Cystocrinus, Dictyocrinus, Echinocystites, Echino-encrinites, Eocystites, Glyptocystites, Gomphocystites, Hemicosmites, Heterocystites, Holocystites, Lepadocrinus, Lichenocrinus, Malocystites, Palæocystites, Pleurocystites, Sphærocystites, Strobilocystites.

**ORDER BLASTOIDEA.**—Blastoidocrinus, Codonites, Eleutheroocrinus, Granatocrinus, Nucleocrinus, Pentremites.

**ORDER OPHIUROIDEA.**—Protaster, Onychaster.

**ORDER ASTEROIDEA.**—Codaster, Eugaster, Palæaster, Palæasterina, Palæocoma, Petraster, Schœnaster, Stenaster, Taeniaster.

**ORDER AGELACRINIDÆ.**—Agelacrinus, Edrioaster, Hemicystites.

- ACROCRINUS, Yandell, 1855, Am. Jour. Sci., vol. 20. [Ety. *akros*, the summit; *krinon*, lily.]
- shumardi, Yandell, 1855, Am. Jour. Sci., vol. 20, Kaskaskia Gr. [Ety. proper name.]
- urniformis, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Sig. urn-shaped.]
- ACTINOCRINUS, Miller, 1821, Nat. Hist. Crinoidea. [Ety. *aktin*, a ray or thorn; *krinon*, a lily.]
- abnormis*, see Megistocrinus abnormis.
- ægilops*, see Strotocrinus ægilops.
- æqualis*, see Batocrinus æqualis.
- æquibrachiatus*, see Batocrinus æquibrachiatus.
- æquibrachiatus var. alatus*, see Batocrinus æquibrachiatus *var. alatus*.
- agassizi*, Troost, 1850, Catal. Not defined.
- althæa*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. mythological name.]
- amplus*, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. full sized.]
- andrewsianus*, syn. for Eretmocrinus verneuillianus.
- araneolus*, see Steganocrinus araneolus.
- asterias*, McChesney, 1860, Desc. New Pal. Foss., Burlington Gr. [Sig. in the fashion of a star.]
- asteriscus*, see Batocrinus asteriscus.
- biturbinatus*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. double cone-shaped.]
- brevicornis*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. short-horned.]
- brevis*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. short.]
- brontes*, Hall, 1860, Supp. to Geo. Sur. Iowa, Warsaw Gr. [Ety. mythological name.]
- cælatus*, Hall, 1858, Geo. Sur. Iowa, Burlington Gr. [Sig. carved in relief, sculptured.]
- calyculoides*, see Eretmocrinus calyculoides.
- calyculus*, Hall, 1860, Supp. to Geo. Iowa, Warsaw Gr. [Sig. a little cup or flower-bud.]
- calypso*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Ety. mythological name.]
- cassedayi*, Lyon, 1861, Proc. Acad. Nat. Sci. Phil., Up. Held. Gr. [Ety. proper name.]
- carica*, see Batocrinus carica.
- caroli*, Hall, 1860, Supp. to Geo. Sur. Iowa, Warsaw Gr. [Ety. proper name.]
- cauliculus*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. the small stalk or stem of a plant.]
- chloris*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. mythological name.]
- christyi*, Shumard, 1855, see Batocrinus christyi.
- christyi*, Hall, 1863, see Saccocrinus christyi.
- clarus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. brilliant, illustrious.]
- clavigerus*, see Batocrinus clavigerus.
- clio*, see Eretmocrinus clio.
- clivosus*, Hall, 1861, Jour. Bost. Soc. Nat. Hist., vol. 7, Burlington Gr. [Sig. hilly.]
- clœlia*, see Eretmocrinus clœlia.
- clypeatus*, Hall, 1860, Supp. Geo. Sur. Iowa, Burlington Gr. [Sig. shield-like.]
- concausus*, see Cœlocrinus concausus.
- concinnus*, Shumard, 1855, Geo. Rep. Mo., Burlington Gr. [Sig. handsome.]
- corbulis*, see Batocrinus corbulis.
- coreyi*, Lyon & Casseday, 1859, Am. Jour. Sci., Burlington Gr. [Ety. proper name.]
- corniculum*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Ety. *corniculum*, a little horn—from the urn-shaped body below.]
- cornigerus*, Hall, 1858, see Dorycrinus cornigerus.
- cornigerus*, Lyon & Casseday, 1859, Am. Jour. Sci., vol. 28. This name being preoccupied, Shumard proposed for this species *A. kentuckiensis*.
- cornutus*, Troost, 1850, Catal. Not defined.
- coronatus*, Hall, 1860, Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. crowned.]
- daphne*, Hall, 1863, Crin. Wav. Sands. Ohio, Waverly Gr. [Ety. mythological name.]
- decornis*, Hall, 1860, Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. without horns.]
- delicatulus*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil. Burlington Gr. [Sig. rather delicate.]
- desideratus*, see Dorycrinus desideratus.
- discoideus*, see Batocrinus discoideus.
- divaricatus*, see Dorycrinus divaricatus.
- divergens*, see Amphoracrinus divergens.
- dodecadactylus*, see Batocrinus dodecadactylus.
- doris*, see Batocrinus doris.
- icosidactylus*, see Batocrinus icosidactylus.
- erodus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. *erosus*, eroded, having the parts jagged as if gnawed.]
- eryx*, Hall 1861, Desc. New Crinoidea, Burlington Gr. [Ety. mythological name.]
- eucharis*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Ety. *eu*, very; *charis*, beauty.]
- evansi*, Owen & Shumard, 1850, Jour. Acad. Nat. Sci., 2d ser., vol. 2, Burlington Gr. [Ety. proper name.]
- excerptus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. picked out, selected.]
- fibula*, Troost, 1850, Catal. Not defined.

- fiscellus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. a small basket for fruit, woven of slender twigs.]  
*fosteri*, McChesney, 1860, syn. for *A. cre-latus*.  
*formosus*, see *Batocrinus formosus*.  
*gemmiformis*, see *Batocrinus gemmiformis*.  
*gibbosus*, Troost, 1850. Not defined.  
*glans*, Hall, 1860, Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. an acorn.]  
*glyptus*, see *Strotocrinus glyptus*.  
*gouldi*, see *Dorycrinus gouldi*.  
*hageri*, McChesney, 1860, New Pal. Foss., Burlington Gr. [Ety. proper name.]  
*helice*, Hall, 1863, Crin. Wav. Sands. Ohio, Waverly Gr. [Ety. mythological name.]  
*helice var. eris*, Hall, 1864, 17th Reg. Rep. N. Y., Waverly Gr. [Ety. proper name.]  
*humboldti*, Troost, 1850, Catal. Not defined.  
*hurdiatus*, McChesney, 1860, New Pal. Foss., Burlington Gr. [Ety. proper name.]  
*indianensis*, Lyon & Casseday, 1859, Am. Jour. Sci., vol. 28, Warsaw Gr. [Ety. proper name.]  
*inflatus*, see *Amphorocrinus inflatus*.  
*infrequens*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. not frequent, rare.]  
*insculptus*, see *Strotocrinus insculptus*.  
*inornatus*, see *Batocrinus inornatus*.  
*irregularis*, see *Batocrinus irregularis*.  
*jugosus*, Hall, 1860, Supp. Geo. Sur. Iowa, Keokuk Gr. [Sig. yoked together.]  
*kentuckiensis*, Shumard, Trans. St. Louis Acad. Sci., Up. Held. Gr. [Ety. proper name.]  
*konincki*, see *Batocrinus konincki*.  
*lagna*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. a flask or bottle.]  
*lagunculus*, see *Batocrinus lagunculus*.  
*laura*, see *Batocrinus laura*.  
*lepidus*, see *Batocrinus lepidus*.  
*leucosia*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. mythological name.]  
*limabrachiatus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. *lima*, a file; *brachiatus*, armed.]  
*liratus*, see *Strotocrinus liratus*.  
*lobatus*, Hall, 1860, Supp. to Geo. Sur. Iowa, Keokuk Gr. [Sig. lobate.]  
*locellus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. a chest or casket.]  
*longirostris*, see *Batocrinus longirostris*.  
*longus*, Meek & Worthen, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. *longus*, long.]  
*lowii*, Hall, 1852, Geo. Rep. Iowa, Keokuk Gr. [Ety. proper name.]  
*lucina*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. mythological name.]  
*matuta*, see *Eretmocrinus matuta*.  
*matuta var. attenuata*, see *Eretmocrinus matuta var. attenuata*.  
*Meeki*, Lyon, 1861, Proc. Acad. Nat. Sci. Phil., Niagara Gr. [Ety. proper name.]  
*minor*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. less.]  
*mississippiensis*, see *Dorycrinus mississippiensis*.  
*mississippiensis var. spiniger*, see *Dorycrinus mississippiensis var. spiniger*.  
*missouriensis*, see *Dorycrinus missouriensis*.  
*moniliformis*, Miller, cited by Troost, but the species does not exist in American strata.  
*mortoni*, Troost, 1850. Not defined.  
*multibrachiatus*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. many-armed.]  
*multibrachiatus var. echinatus*, Hall, 1861, Desc. New Crinoidea, Warsaw Gr. [Ety. *echinatus*, prickly.]  
*multicornis*, Lyon, 1860, Trans. Am. Phil. Soc., vol. 13, Devonian. [Sig. many-horned.]  
*mundulus*, see *Batocrinus mundulus*.  
*multiradiatus*, Shumard, 1857, Trans. Acad. Sci. St. Louis, Burlington Gr. [Sig. many-rayed.]  
*nashvillae*, Troost, 1850, Catal. in Proc. Am. Ass'n, Ad. Sci., Keokuk Gr. [Ety. proper name.]  
*nashvillae var. subtractus*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. taken away from.]  
*nyssa*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Ety. mythological name.]  
*oblatu*, Hall, 1860, Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. broader than long.]  
*obpyramidalis*, Winchell & Marcy, syn. for *Melocrinus verneuili*.  
*olliculus*, syn. for *Megistocrinus whitii*.  
*olla*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. a pot or jar.]  
*opusculus*, Hall, 1860, Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. a little fortification.]  
*ornatus*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. ornamented.]  
*ovatus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. egg-shaped.]  
*papillatus*, see *Batocrinus papillatus*.  
*parvus*, Shumard, 1855, Geo. Rep. Mo., St. Louis Gr. [Sig. small.]  
*pendens*, Hall, 1860, Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. hanging down.]  
*penicillus*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. a painter's brush or pencil.]  
*pentagonus*, see *Steganocrinus pentagonus*.  
*pentaspinus*, Lyon, 1860, Trans. Am. Phil. Soc., vol. 14, Devonian. [Sig. five-spined.]  
*pernodosus*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. very knotty.]

- perumbrosus*, see *Strotocrinus perumbrosus*.
- pistilliformis*, see *Batocrinus pistilliformis*.
- pistillus*, see *Batocrinus pistillus*.
- planobasalis*, see *Amphoracrinus planobasalis*.
- planodiscus*, see *Batocrinus planodiscus*.
- plumosus*, see *Glyptocrinus plumosus*.
- pocillum*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. a little cup.]
- polydactylus*, Schenectady Reflector, 1835, see *Mariacrinus pachydactylus*.
- præcursor*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. a forerunner.]
- proboscidiæ*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. having a proboscis].
- pyriformis*, Shumard, see *Batocrinus pyriformis*.
- pyriformis* var. *rudis*, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. rough.]
- pyramidatus*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Ety. from pyramidal summit.]
- quadrispinus*, see *Amphoracrinus quadrispinus*.
- quaternarius*, Hall, 1860, Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. containing four, quaternary.]
- quaternarius* var. *spiniferus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. spine-bearing.]
- quinquelobus*, see *Dorycrinus quinquelobus*.
- ramulosus*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. branchy.]
- regalis*, see *Strotocrinus regalis*.
- remibrachiatus*, see *Batocrinus remibrachiatus*.
- reticulatus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. reticulated like net-work.]
- rotundus*, Yandell & Shumard, 1855, Geo. Rep. Mo., Burlington Gr. [Sig. round.]
- rudis*, see *Strotocrinus rudis*.
- rusticus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. coarse, rough.]
- scitulus*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. handsome, pretty.]
- sculptus*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. engraved, sculptured.]
- securis*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. an axe or hatchet with a broad edge.]
- semiradiatus*, see *Saccocrinus semiradiatus*.
- senarius*, Hall, 1860, Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. consisting of six.]
- sexarmatus*, Hall, 1860, Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. six-armed.]
- sillimani*, syn. for *A. rusticus*.
- similis*, Hall, 1860, Supp. to Geo. Sur. Iowa, Warsaw Gr. [Sig. similar.]
- sinuosus*, see *Batocrinus sinuosus*.
- speciosus*, syn. for *Strotocrinus regalis*.
- spinobrachiatus*, see *Amphoracrinus spinobrachiatus*.
- spinotentaculus*, Hall, 1860, Supp. to Geo. Sur. Iowa, Burlington Gr. [Ety. *spina*, a spine; *tentaculus*, a feeler.]
- spinulosus*, Hall, 1860, Supp. to Geo. Sur. Iowa, Keokuk Gr. [Sig. full of little spines.]
- steropeus*, Hall, 1860, Supp. to Geo. Sur. Iowa, Warsaw Gr. [Ety. mythological name.]
- subaculeatus*, see *Dorycrinus subaculeatus*.
- subæqualis*, see *Batocrinus subæqualis*.
- subturbinatus*, see *Dorycrinus subturbinatus*.
- subumbrosus*, Hall, 1860, Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. somewhat umbrella-like.] Syn. (?) for *Strotocrinus liratus*.
- subventricosus*, see *Physetocrinus subventricosus*.
- superalis*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. very wide.]
- symmetricus*, see *Dorycrinus symmetricus*.
- tenuidiscus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. slender disc.]
- tenuiradiatus*, Hall, 1847, see *Palæocystites tenuiradiatus*.
- tenuiradiatus*, Hall, 1861, Desc. New Crin. Burlington Gr. [Sig. slender-rayed.]
- tenuisculptus*, syn. for *Actinocrinus sculptus*.
- thalia*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. mythological name.]
- themis*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. mythological name.]
- thetis*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. mythological name.]
- thoas*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. mythological name.]
- tholus*, see *Strotocrinus tholus*.
- tricornis*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. three-horned.]
- trinodus*, see *Dorycrinus trinodus*.
- turbinatus*, see *Batocrinus turbinatus*.
- turbinatus* var. *elegans*, see *Batocrinus turbinatus* var. *elegans*.
- umbrosus*, Hall, see *Strotocrinus umbrosus*.
- unicarinatus*, Hall, 1860, Supp. to Geo. Sur. Iowa, Keokuk Gr. [Sig. single keeled.]
- unicornis*, see *Dorycrinus unicornis*.
- unispinus*, see *Dorycrinus unispinus*.
- urna*, Troost, 1850. Not defined.
- urniformis*, McChesney, 1860, New Pal. Foss., Burlington Gr. [Sig. urn-formed.]
- validus*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci., Phil., Burlington Gr. [Sig. stoutly built.]

- ventricosus, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. bulging out.]  
 ventricosus *var.* cancellatus, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. cancellated.]  
 ventricosus *var.* internodus, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. *inter*, between; *nodus*, a joint.]  
*verneuili*, see *Melocrinus verneuili*.  
*verneuillianus*, see *Eretmocrinus verneuillianus*.  
 verrucosus, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. full of warts, warty.]  
 viaticus, White, 1874, Rep. Invert. Foss., Lower Carb. [Ety. *viaticus*, a parting repast—application not evident.]  
 viminalis, Hall, 1863, Crinoidea in Wav. Sandstone Ohio, Waverly Sandstone. [Sig. bearing twigs for plaiting.]  
 wachsmuthi, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Ety. proper name.]  
*whitfieldi*, see sub-genus *Saccocrinus whitfieldi*.  
*whitii*, see *Megistocrinus whitii*.  
 yandelli, Shumard, 1857, Trans. St. Louis Acad. Sci., Lower Carb. [Ety. proper name.]
- AGARICOCRINUS**, Troost, 1850, Catal. in Proc. Am. Ass'n. [Ety. *agarikon*, a sort of tree-fungus; *krinon*, a lily.]  
*americanus*, Roemer, 1854, (Amphoracrinus americanus) Bronn's Leth. Geog., vol. 2, Warsaw Gr. [Ety. proper name.]  
*bellatrema*, see *Amphoracrinus bellatrema*.  
 bullatus, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. studded with round knobs; bossed.]  
 calyculus, Hall, 1860, Supp. to Geo. Iowa, Warsaw Gr. [Sig. the cup of a flower.]  
 corrugatus, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. corrugated.]  
*excavatus*, see *Amphoracrinus excavatus*.  
 geometricus, Hall, 1860, Supp. to Geo. Iowa, Burlington Gr. [Sig. geometrical.]  
 gracilis, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. slender.]  
 inflatus, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. inflated.]  
 nodosus, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. knobbed.]  
 ornotrema, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. not evident—the word may be a printer's mistake for *ornatotrema*, having a beautiful opening.]  
 planoconvexus, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. *planus*, flat; *convexus*, convex.]
- pentagonus, Hall, 1860, Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. pentagonal.]  
 pentagonus *var.* convexus, Hall, 1860, Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. convex.]  
 stellatus, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. covered with stars.]  
*tuberosus*, Troost, 1849, Catal. This is the same species described by Roemer as *Amphoracrinus americanus* in Bronn's Leth. Geognostica, vol. 2, 1852–54, and by the rules of priority it must bear Roemer's name, for Troost did not figure or describe it.  
 whitfieldi, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Ety. proper name.]  
 wortheni, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Ety. proper name.]
- AGASSIZOCRINUS**, Troost, 1850, Ms. of Monograph Crinoidea. [Ety. *Agassiz*, the eminent naturalist; *krinon*, a lily.]  
 carbonarius, Worthen, 1873, Geo. Sur. Ill., vol. 5, Up. Coal Meas. [Ety. from the *Coal Measures*.]  
 conicus, Owen & Shumard, 1851, Jour. Acad. Nat. Sci. Phil., 2d ser., vol. 2, Chester Gr. [Sig. like a cone.]  
 dactyliformis, Troost, 1850, as identified by Shumard, 1853, Marcy's Rep. Red. Riv., Chester Gr. [Sig. finger-shaped.]  
 chesterensis, Worthen, 1873, Geo. Sur. Ill., vol. 5, Chester Gr. [Ety. proper name.]  
 constrictus, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Sig. constricted.]  
 gibbosus, Hall, 1858, Geo. Rep. Iowa, Chester Gr. [Sig. gibbous.]  
 globosus, Worthen, 1873, Geo. Sur. Ill., vol. 5, Chester Gr. [Sig. globose.]  
*gracilis*, Troost, 1850. Not defined.  
 occidentalis, Owen & Shumard, 1852, (Poteriocrinus occidentalis) Jour. Acad. Nat. Sci. Phil., Chester Gr. [Sig. western.]  
 pentagonus, Worthen, 1873, Geo. Sur. Ill., vol. 5, Chester Gr. [Sig. pentagonal.]  
 tumidus, Owen & Shumard, 1852, (Poteriocrinus tumidus) Jour. Acad. Nat. Sci. Phil., Chester Gr. [Sig. tumid or swollen.]
- AGELACRINUS**, Vanuxem, 1842, (Agelacrinites) Geo. Rep. 3rd Dist. N. Y. [Ety. *agele*, a herd; *krinon*, a lily.]  
 billingsi, Chapman, 1860, Can. Jour., vol. 5, Trenton Gr. [Ety. proper name.]  
 cincinnatiensis, Roemer, 1851, Verh. Naturh. Rhein. Westph., vol. 8, Cincinnati Gr. [Ety. proper name.]  
 dicksoni, Billings, 1857, Rep. of Progr., Trenton Gr. [Ety. proper name.]  
 hamiltonensis, Vanuxem, 1842, Geo. Rep. 3rd Dist. N. Y., Ham. Gr. [Ety. proper name.]  
 kaskaskiensis, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Ety. proper name.]

- pileus, Hall, 1866, Pamphlet, Cin'ti Gr. [Ety. *pileus*, a felt cap or hat made to fit close.]
- squamosus, Meek & Worthen, 1868, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. covered with scales.]
- stellatus*, see Hemicyclites *stellatus*.
- vorticellatus, Hall, 1866, Pamphlet, Cincinnati Gr. [Sig. whorled.]
- ALLOPROSALOCRINUS, Casseday & Lyon, 1860, Proc. Am. Acad. Arts & Sci., vol. 5. [Ety. *allopriosallos*, inclining first to one side and then to another; *krinon*, a lily.]
- conicus, Casseday & Lyon, 1860, Proc. Am. Acad. Arts & Sci., vol. 5, Warsaw Gr. [Sig. conical.]
- euconus, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. *eu*, perfect; *konos*, cone.]
- depressus, Casseday & Lyon, 1860, Proc. Am. Acad. Arts & Sci., vol. 5, Warsaw Gr. [Sig. depressed.]
- leæ*, Troost, 1850, (Conocrinus *leæ*). Not defined.
- tuberculosis*, Troost, 1850, (Conocrinus *tuberculosis*). Not defined.
- AMPHORACRINUS, Austin, 1848, Quar. Jour. Geo. Soc. Lond., vol. 4. Sub-genus of Actinocrinus. [Ety. *amphora*, a cup or goblet; *krinon*, a lily.]
- americanus*, see Agaricocrinus *americanus*.
- bellatrema, Hall, 1861, (Actinocrinus *bellatrema*) Jour. Bost. Soc. Nat. Hist., vol. 7, Burlington Gr. [Sig. beautiful opening.]
- divergens, Hall, 1860, (Actinocrinus *divergens*) Supp. Geo. Rep. Iowa, Burlington Gr. [Sig. separating.]
- excavatus, Hall, 1861, (Actinocrinus *excavatus*) Desc. New Crinoidea, Burlington Gr. [Sig. hollowed out.]
- inflatus, Hall, 1861, (Actinocrinus *inflatus*) Desc. New Crinoidea, Burlington Gr. [Sig. inflated.]
- planobasalis, Hall, 1858, (Actinocrinus *planobasalis*) Geo. Rep. Iowa, Burlington Gr. [Sig. flat-based.]
- quadrispinus, White, 1862, (Actinocrinus *quadrispinus*) Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. four-spined.]
- spinobrachiatus, Hall, 1860, (Actinocrinus *spinobrachiatus*) Supp. Geo. Rep. Iowa, Burlington Gr. [Sig. spiny armed.]
- AMYGDALOCYSTITES, Billings, 1854, Can. Jour., vol. 2. [Ety. *amygdalos*, an almond; *kustis*, a bladder.]
- florealis, Billings, 1854, Can. Jour., vol. 2, Trenton Gr. [Sig. flower-like.]
- radiatus, Billings, 1854, Can. Jour., vol. 2, Trenton Gr. [Sig. radiating from a point.]
- tenuistriatus, Billings, 1854, Can. Jour., vol. 2, Trenton Gr. [Sig. finely striated.]
- ANCYROCINUS, Hall, 1862, 15th Reg. Rep. N. Y. [Ety. *ankura*, a grapnel; *krinon*, a lily.]
- bulbosus, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. bulbous.]
- spinosus, Hall, 1862, 15th Reg. Rep. N. Y., Up. Held. Gr. [Sig. covered with many spines.]
- ANOMALOCRINUS, Meek & Worthen, 1868, Geo. of Ill., vol. 3. [Ety. *anomos*, irregular; *krinon*, a lily.]
- incurvus, Meek & Worthen, 1865, (Heterocrinus *incurvus*) Proc. Acad. Nat. Sci. Phil. [Ety. from one incurved arm.]
- ANOMALOCYSTITES, Hall, 1859, Pal. N. Y., vol. 3. [Ety. *anomos*, irregular; *kustis*, a bladder.] Prof. Billings regards this genus as a synonym for *Ateleocystites*.
- balanoides, Meek, 1872, Am. Jour. Sci., 3rd ser., vol. 3. [Sig. resembling the shell of the *Balanus*.]
- cornutus, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. horned.]
- disparilis, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. different.]
- APIOCYSTITES, Forbes, 1848, Mem. Geo. Sur. Great Brit. [Ety. *apion*, a pear; *kustis*, a bladder.] A. syn (?) for *Lepadocrinus*.
- canadensis, Billings, 1866, Catal. Sil. Foss. Antic., Niagara Gr. [Ety. proper name.]
- elegans, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. elegant.]
- huronensis, Billings, 1866, Catal. Sil. Foss. Antic., Niagara Gr. [Ety. proper name.]
- imago, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Ety. *imago*, an image, likeness, perfect state.]
- tecumseth, Billings, 1866, Catal. Sil. Foss. Antic., Niagara Gr. [Ety. proper name.]
- ARCHÆOCIDARIS, McCoy, 1844, Carb. Foss., Ireland. [Ety. *archaios*, ancient; *cidaris*, a turban.]
- aculeatus, Shumard, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. armed with sharp points.]
- agassizi, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Ety. proper name.]
- biangulatus, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. double-angled.]
- cratis, White, 1876, Geol. of Uinta Mountains, Lower Aubrey Gr. [Sig. like a basket.]
- gracilis, Newberry, 1861, Ives, Col. Ex. Ex., Up. Carb. [Sig. slender.]
- keokuk, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Ety. proper name.]
- longispinus, Newberry, 1861, Ives, Col. Ex. Ex., Up. Carb. [Sig. long-spined.]
- megastylus, Shumard, 1858, Trans. St. Louis Acad. Sci., Up. Coal Meas. [Sig. having large spines.]



- mucronatus*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Chester Gr. [Sig. sharp-pointed.]
- norwoodi*, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Ety. proper name.]
- ornatus*, Newberry, 1861, Ives, Col. Ex. Ex., Up. Carb. [Sig. ornamented.]
- shumardiana*, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Ety. proper name.]
- triserrata*, Meek, 1872, Pal. E. Neb., Up. Coal Meas. [Sig. three-notched.]
- trudifera*, White, 1874, Rep. Invert. Foss., Carb. [Sig. bearing a pike.]
- verneuiliiana*, Swallow, 1858, Trans. St. Louis Acad. Sci. This name was preoccupied by King, and the species is now known as *A. aculeatus*.
- wortheni*, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Ety. proper name.]
- ASPIDOCRINUS**, Hall, 1859, Pal. N. Y., vol. 3. [Ety. *aspis*, shield; *krinon*, a lily.]
- callosus*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. thick-skinned.]
- digitatus*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. fingered.]
- scutelliformis*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. from the scutelliform base.]
- Asterias*, Lamarck, 1815, Hist. Nat. Anim. sans. Vert.
- anthoni*, see *Palæaster jamesi*.
- antiqua*, see *Palæaster antiqua*.
- antiquata*, see *Palæaster antiquata*.
- matutina*, see *Palæaster matutina*.
- Asterocrinus*, Lyon, 1857, Geo. Sur. Ky., vol. 3. This name was preoccupied by Munster. See *Pterotocrinus*.
- capitalis*, see *Pterotocrinus capitalis*.
- coronarius*, see *Pterotocrinus coronarius*.
- Astrios*, Troost, 1850, Catalogue. Not defined.
- tennesseæ*, Troost, 1850. Not defined.
- Astrocrinites*, Conrad in Catalogue Ann. Geo. Rep., 1840-41. This name was proposed but not defined, moreover the name was preoccupied.
- pachydactylus*, see *Mariacrinus pachydactylus*.
- Ataxocrinus*, Lyon, 1869, syn. for *Anomalocrinus*.
- caponiformis*, syn. for *Anomalocrinus incurvus*.
- ATELEOCYSTITES**, Billings, 1858, Can. Org. Rem., Decade 3. [Ety. *ateles*, defective or incomplete; *kystis*, a bladder.] Professor Billings regards Hall's genus *Anomalocystites*, and DeKoninck's genus *Placcocystites* as congeneric with this genus and therefore synonyms.
- huxleyi*, Billings, 1858, Can. Org. Rem., Decade 3, Trenton Gr. [Ety. proper name.]
- Balanocrinus*, Troost, 1850. This name was pre-occupied. See *Lampterocrinus*.
- inflatus*, see *Lampterocrinus inflatus*.
- BARYCRINUS**, Wachsmuth, 1868, Proc. Acad. Nat. Sci. [Ety. *barys*, heavy; *krinon*, a lily.]
- geometricus*, Meek & Worthen, 1873, Geo. Sur. Ill., vol. 5, Keokuk Gr. [Sig. geometrical.]
- hercules*, Meek & Worthen, 1868, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Ety. mythological name.]
- hoveyi*, Hall, 1861, (*Cyathocrinus hoveyi*) Desc. New Crin., Keokuk Gr. [Ety. proper name.]
- magnificus*, Meek & Worthen, 1868, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. large-sized.]
- mammatus*, Worthen, 1873, Geo. Sur. Ill., vol. 5, Keokuk Gr. [Sig. covered with protuberances.]
- pentagonus*, Worthen, 1873, Geo. Sur. Ill., vol. 5, Keokuk Gr. [Sig. pentagonal.]
- spectabilis*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., St. Louis Gr. [Sig. notable or worth seeing.]
- striatus*, Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. striated.]
- subtumidus*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. somewhat tumid or as if blown up.]
- thomæ*, Hall, 1860, (*Cyathocrinus thomæ*) Supp. Geo. Sur. Iowa, St. Louis Gr. [Ety. proper name.]
- BATOCRINUS**, Casseday, 1869, Proc. Acad. Nat. Sci. Phil. [Ety. *batos*, a prickly bush; *krinon*, a lily.]
- æqualis*, Hall, 1858, (*Actinocrinus æqualis*) Geo. Rep. Iowa, Burlington Gr. [Sig. equal.]
- æquibrachiatus*, McChesney, 1860, (*Actinocrinus æquibrachiatus*) New Pal. Foss., Burlington Gr. [Sig. equal-armed.]
- æquibrachiatus var. alatus*, Hall, 1861, (*Actinocrinus æquibrachiatus var. alatus*) Bost. Jour. Nat. Hist., vol. 7, Burlington Gr. [Sig. winged.]
- asteriscus*, Meek & Worthen, 1860, (*Actinocrinus asteriscus*) Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. little star.]
- calyculoides*, see *Eretmocrinus calyculoides*.
- carica*, Hall, 1861, (*Actinocrinus carica*) Desc. New Crinoidea, Burlington Gr. [Sig. a kind of dried fig.]
- cassedayanus*, Meek & Worthen, 1868, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. proper name.]
- christyi*, Shumard, 1855, (*Actinocrinus christyi*) Geo. Sur. Mo., Burlington Gr. [Ety. proper name.]
- claviger*, Hall, 1860, (*Actinocrinus claviger*) Supp. Geo. Sur. Iowa, Burlington Gr. [Sig. club-bearing.]
- cloelia*, see *Eretmocrinus cloelia*.
- corbulis*, Hall, 1861, (*Actinocrinus corbulis*) Desc. New Crinoidea, Burlington Gr. [Sig. a little basket.]
- discoideus*, Hall, 1858, (*Actinocrinus discoideus*) Geo. Rep. Iowa, Burlington Gr. [Sig. quoit-shaped.]



- dodecadactylus, Meek & Worthen, 1861, (Actinocrinus dodecadactylus) Proc. Nat. Sci. Phil., Burlington Gr. [Sig. twelve-fingered.]
- doris, Hall, 1861, (Actinocrinus doris) Desc. New Crinoidea, Burlington Gr. [Ety. a mythological name.]
- formosus, Hall, 1860, (Actinocrinus formosus) Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. beautiful.]
- gemmaformis, Hall, 1860, (Actinocrinus gemmaformis) Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. bud-like.]
- icosidactylus, Casseday, 1854 (Actinocrinus icosidactylus) Zeitsch. Deutsch. Geol. Gesellsch. Warsaw Gr. [Sig. twenty-fingered.]
- inornatus, Hall, 1860, (Actinocrinus inornatus) Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. not ornamented.]
- irregularis, Casseday, 1854, Zeitsch. Deutsch. Geol. Gesell., Warsaw Gr. [Sig. irregular.]
- konincki, Shumard, 1855, (Actinocrinus konincki) Geo. Rep. Mo., Burlington Gr. [Ety. proper name.]
- lagunculus, Hall, 1860, (Actinocrinus lagunculus) Supp. to Geo. Sur. Iowa, Warsaw Gr. [Sig. small flask, small bottle.]
- laura, Hall, 1861, (Actinocrinus laura) Desc. New Crinoidea, Burlington Gr. [Ety. proper name.]
- lepidus, Hall, 1860, (Actinocrinus lepidus) Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. elegant.]
- longirostris, Hall, 1858, (Actinocrinus longirostris) Geo. Rep. Iowa, Burlington Gr. [Sig. having a long proboscis.]
- magnificus*, see Eretmocrinus *magnificus*.
- mundulus, Hall, 1860, (Actinocrinus mundulus) Supp. to Geo. Sur. Iowa, Warsaw Gr. [Sig. neat, trim, nice.]
- neglectus, Meek & Worthen, 1868, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. overlooked.]
- papillatus, Hall, 1860, (Actinocrinus papillatus) Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. shaped like a bud.]
- pistilliformis, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Kinderhook Gr. [Sig. in the form of a pestle.]
- pistillus, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. a pestle.]
- planodiscus, Hall, 1860, (Actinocrinus planodiscus) Supp. to Geo. Sur. Iowa, Warsaw Gr. [Sig. a plain disc.]
- pyriformis, Shumard, 1855, (Actinocrinus pyriformis) Geo. Sur. Mo., Burlington Gr. [Sig. pear-shaped.]
- quasillus, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. a small basket.]
- remibrachiatus*, see sub-genus Eretmocrinus *remibrachiatus*.
- sinuosus, Hall, 1860, (Actinocrinus sinuosus) Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. full of curves.]
- subaequalis, McChesney, 1860, (Actinocrinus subaequalis) New Pal. Foss., Burlington Gr. [Sig. somewhat equal.]
- trochiscus, Meek & Worthen, 1868, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. a little wheel.]
- turbinatus, Hall, 1858, (Actinocrinus turbinatus) Geo. Rep. Iowa, Burlington Gr. [Sig. top-shaped.]
- turbinatus *var. elegans*, (Actinocrinus turbinatus *var. elegans*) Geo. Rep. Iowa, Burlington Gr. [Sig. elegant.]
- verneuillianus*, see Eretmocrinus *verneuillianus*.
- BELEMNOCRINUS, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9. [Ety. *belemnion*, a dart, javelin; *krinon*, a lily.]
- typus, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Ety. type of the genus.]
- whitii, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. proper name.]
- BLASTOIDOCRINUS, Billings, 1859, Decade 4. [Ety. *blastos*, bud; *eidon*, form; *krinon*, lily.]
- carcharidens, Billings, 1859, Geo. Sur. of Can., Decade 4, Chazy Gr. [Ety. *carcharus*, a shark; *dens*, a tooth.]
- BRACHIOCRINUS, Hall, 1859, Pal. N. Y., vol. 3. [Ety. *brachium*, an arm; *krinon*, a lily.]
- nodosarius, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. knotty.]
- BURSACRINUS, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil. [Ety. *bursa*, a purse; *krinon*, a lily.]
- confirmatus, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. very thick or firm.]
- wachsmuthi, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. proper name.]
- Cacabocrinus*, Troost, 1850. It was never described. The fossils that have been referred to it will be found under *Dolatocrinus*.
- CALATHOCRINUS, Hall, 1861. This name was preoccupied by Von Meyer, in 1848.
- CALCEOCRINUS, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *calceus*, a shoe; *krinon*, a lily.]
- barrisi, Worthen, 1875, Geo. Sur. Ill., vol. 6, Devonian. [Ety. proper name.]
- bradleyi, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Ety. proper name.]
- chrysalis, Hall, 1859, (Cheirocrinus chrysalis) 13th Reg. Rep. N. Y., Niagara Gr. [Sig. chrysalis.]
- clarus, Hall, 1862, (Cheirocrinus clarus) 15th Reg. Rep. N. Y., Hamilton Gr. [Sig. distinct, remarkable.]

- dactylus, Hall, 1859, (Cheirocrinus dactylus) 13th Reg. Rep. N. Y., Burlington Gr. [Sig. a finger.]
- lamellosus, Hall, 1859, (Cheirocrinus lamellosus) 13th Reg. Rep. N. Y., Burlington Gr. [Sig. in very thin plates.]
- nodosus, Hall, 1859, (Cheirocrinus nodosus) 13th Reg. Rep. N. Y., Warsaw Gr. [Sig. knobbed.]
- perplexus, Shumard, 1866, (Cheirocrinus perplexus) Trans. St. Louis Acad. Sci., Keokuk Gr. [Sig. intricate, obscure.]
- stigmatus, Hall, 1863, (Cheirocrinus stigmatus) Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. marked, branded.]
- tunicatus, Hall, 1859, (Cheirocrinus tunicatus) 13th Reg. Rep. N. Y., Warsaw Gr. [Sig. coated.]
- ventricosus, Hall, 1859, (Cheirocrinus ventricosus) 13th Reg. Rep. N. Y., Burlington Gr. [Sig. bulging out.]
- wachsmuthi, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. proper name.]
- CALCOCYSTITES**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *kallos*, beautiful; *kystis*, bladder.]
- jewetti, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Ety. proper name.]
- Campanulites*, Troost, 1850. Not defined.
- tesselatus*, Troost, 1850. Not defined.
- CARABOCRINUS**, Billings, 1857, Rep. of Progr. [Ety. *karabos*, a crab; *krinon*, a lily.]
- radiatus, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. radiating from a point.]
- tuberculatus, Billings, 1859, Decade 4, Hud. Riv. Gr. [Sig. covered with tubercles.]
- vancortlandti, Billings, 1859, Decade 4, Trenton Gr. [Ety. proper name.]
- CARYOCRINUS**, Say, 1825, Jour. Acad. Nat. Sci., vol. 4. [Ety. *karyon*, a nut; *krinon*, a lily.]
- globosus*, Troost, 1850. Not defined.
- granulatus*, Troost, 1850. Not defined.
- hexagonus*, Troost. Not defined.
- insculptus*, Troost. Not defined.
- loricatus*, Say, 1825, Jour. Acad. Nat. Sci., vol. 4, Clinton & Niagara Gr. Syn. for *C. ornatus*.
- meconoides*, Troost. Not defined.
- ornatus, Say, 1825, Jour. Acad. Nat. Sci., vol. 4, Clinton & Niagara Gr. [Sig. adorned.]
- Caryocystites*, Von Buch, as cited by Hall in 1861, in Geo. Rep. Wis. See *Holocystites*.
- alternatus*, see *Holocystites alternatus*.
- cylindricus*, see *Holocystites cylindricus*.
- CATILLOCRINUS**, Troost, 1850, Cat. Foss., described by Shumard, 1866, Trans. St. Louis Acad. Sci. [Ety. *catillus*, a small bowl; *krinon*, a lily.]
- bradleyi, Meek & Worthen, 1868, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Ety. proper name.]
- tennesseeae, Troost, 1850, Catalogue, but described by Shumard, in 1866, in Trans. St. Louis Acad. Sci., Warsaw Gr. [Ety. proper name.]
- wachsmuthi, Meek & Worthen, 1866, (Synbathocrinus wachsmuthi) Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. proper name.]
- CHEIROCRINUS**, Hall, 1860, 13th Reg. Rep. This name seems to have been pre-occupied by Eichwald, in 1856, and therefore cannot stand. Shumard suggests the close affinity with *Calceocrinus*, and I have therefore referred the species to that genus.
- chrysalis*, see *Calceocrinus chrysalis*.
- clarus*, see *Calceocrinus clarus*.
- dactylus*, see *Calceocrinus dactylus*.
- lamellosus*, see *Calceocrinus lamellosus*.
- nodosus*, see *Calceocrinus nodosus*.
- perplexus*, see *Calceocrinus perplexus*.
- stigmatus*, see *Calceocrinus stigmatus*.
- tunicatus*, see *Calceocrinus tunicatus*.
- ventricosus*, see *Calceocrinus ventricosus*.
- CLEIOCRINUS**, Billings, 1857, Rep. of Progr. [Ety. *kleio*, I close; *krinon*, a lily.]
- grandis, Billings, 1859, Can. Org. Rem., Decade 4, Trenton Gr. [Sig. great.]
- libanus*, Safford, 1869, Geo. of Tenn. Not defined.
- magnificus, Billings, 1859, Can. Org. Rem., Decade 4, Trenton Gr. [Sig. magnificent.]
- regius, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. royal, magnificent.]
- CLOSTEROCRINUS**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *kloster*, a spindle; *krinon*, a lily.]
- elongatus, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. lengthened.]
- COCCOCRINUS**, Muller, 1855, Verhand. Naturhist. Vereins Rhein und Westph., Jahr. 12. [Ety. *kokkos*, a berry; *krinon*, a lily.]
- bacca*, Roemer, 1860, Sil. Fauna. West Tenn., Niagara Gr. [Sig. a small round fruit, a berry.]
- CODASTER**, McCoy, 1849, Ann. & Mag. Nat. Hist. 2d ser., vol. 3. [Ety. *kodon*, a bell; *aster*, a star.]
- alternatus, Lyon, 1857, Geo. Sur. Ky., vol. 3, Corniferous Gr. [Sig. alternating.]
- americanus, Shumard, 1858, Trans. St. Louis Acad. Sci., Up. Held. Gr. [Ety. proper name.]
- kentuckiensis, Shumard, 1858, Trans. St. Louis Acad. Sci., Low. Carb. [Ety. proper name.]
- pyramidatus, Shumard, 1858, Trans. St. Louis Acad. Sci., Up. Held. Gr. [Sig. in the form of a pyramid.]
- whitii, Hall, 1861, Desc. New Crinoidea, Bost. Jour. Nat. Hist., vol. 7, Burlington Gr. [Ety. proper name.]

- CODONITES, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil. [Ety. *kodon*, a bell; *lithos*, stone.]
- gracilis*, Meek & Worthen, 1873, Geo. Sur. Ill., vol. 5, Burlington Gr. [Sig. slender.]
- stelliformis*, Owen & Shumard, 1850, (Pentremites stelliformis), Jour. Acad. Nat. Sci. Phil., 2d series, vol. 2, Burlington Gr. [Sig. star-shaped.]
- CÆLIOCRINUS, White, 1863, Jour. Bost. Soc. Nat. Hist., vol. 7. [Ety. *koilia*, the belly; *krinon*, a lily.]
- dilatatus*, Hall, 1861, (Poteriocrinus dilatatus) Desc. New Crinoidea, Burlington Gr. [Sig. widened, spread out.]
- subspinosus*, White, 1863, Jour. Bost. Soc. Nat. Hist., vol. 7, Burlington Gr. [Sig. somewhat covered with spines.]
- ventricosus*, Hall, 1861, (Poteriocrinus ventricosus) Desc. New Crinoidea, Burlington Gr. [Sig. bulging out.]
- CÆLOCINUS, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil. [Ety. *koilos*, hollow; *krinon*, a lily.]
- concavus*, Meek & Worthen, 1861, (Actinocrinus concavus) Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. depressed, concave.]
- COMAROCYSTITES, Billings, 1854, Can. Jour., vol. 2. [Ety. *komaron*, a strawberry; *kustis*, a bladder.]
- obconicus*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Trenton Gr. [Sig. inversely conical.]
- punctatus*, Billings, 1854, Can. Jour., vol. 2, Trenton Gr. [Sig. punctate.]
- shumardi*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Trenton Gr. [Ety. proper name.]
- Conocrinus*, Troost. Not defined.
- CORONOCRINUS, Hall, 1859, Pal. N. Y., vol. 3. [Ety. *korone*, a crown; *krinon*, a lily.]
- polydactylus*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. many-fingered.]
- COTYLEDONOCRINUS, Casseday & Lyon, 1860, Proc. Am. Acad. Arts & Sci., vol. 5. [Ety. *kotyledon*, any cup-shaped hollow or cavity; *krinon*, a lily.]
- pentalobus*, Casseday & Lyon, 1860, Proc. Am. Acad. Arts & Sci., vol. 5, Kaskaskia Gr. [Sig. five-lobed.]
- CRINOCYSTITES, Hall, 1864, 20th Reg. Rep. [Ety. *krinon*, a lily; *kustis*, a bladder.]
- chrysalis*, Hall, 1864, 20th Reg. Rep., Niagara Gr. [Sig. chrysalis.]
- (?) *rectus*, Hall, 1864, see Rhodocrinus (?) *rectus*.
- Crumenacrinites*, Troost, 1850. Not defined.
- onalis*, Troost, 1850. Not defined.
- CTENOCRINUS, Bronn, 1840, Leonh. und Bronn, Jahrb. [Ety. *kten*, comb; *krinon*, a lily.] This genus may include the species referred to Macrostylocrinus, if so, it would have priority.
- bainbridgensis*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Portage Gr. [Ety. proper name.]
- breviradiatus*, Hall & Whitfield, 1872, Ham. Gr. [Sig. having short rays.]
- Cupellæcrinus*. This name was proposed by Troost in his catalogue published in 1850, in Proc. Am. Ass'n, with the following species, *C. buchii*, *C. corrugatus*, *C. inflatus*, *C. laevis*, *C. magnificus*, *C. pentagonalis*, *C. roseiformis*, *C. stellatus*, and *C. striatus*. As the words have never been illustrated or defined, they must be regarded as out of the list.
- CYATHOCRINUS, Miller, 1821, Nat. Hist. Crinoidea. [Ety. *cyathos*, a cup or goblet; *krinon*, a lily.]
- angulatus*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. having angles, cornered.]
- arboreus*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. tree-like.]
- bulbosus*, Hall, 1862, 15th Reg. Rep. N. Y., Up. Held. Gr. [Sig. bulbous.]
- bullatus*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. bossed, studded with small round knobs.]
- conglobatus*, Troost. Not defined.
- cora*, Hall, 1864, 20th Reg. Rep. Niagara Gr. [Ety. a Roman proper name.]
- cornutus*, Owen & Shumard, 1850, Jour. Acad. Nat. Sci., 2d ser., vol. 2, Burlington Gr. [Sig. horned.]
- corrugatus*, Troost. Not defined.
- crassibrachiatus*, Hall, 1860, Supp. to Geo. Iowa, Burlington Gr. [Sig. thick-armed.]
- crassus*, see Zeacrinus *crassus*.
- crateriformis*, Troost. Not defined.
- decadactylus*, Lyon & Casseday, 1859, Am. Jour. Sci. & Arts, vol. 28, Low. Carb. [Sig. ten-fingered.]
- decadactylus*, see Scaphiocrinus *decadactylus*. This name was preoccupied.
- depressus*, Troost, see Zeacrinus *depressus*.
- divaricatus*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. wide apart, diverging.]
- enormis*, Meek & Worthen, 1865, (Poteriocrinus *enormis*) Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. unusually large.]
- farleyi*, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Ety. proper name.]
- fasciatus*, Hall, 1876, 28th Reg. Rep. Niagara Gr. [Sig. striped.]
- florealis*, see Zeacrinus *florealis*.
- fragilis*, Meek & Worthen, 1868, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. frail, easily broken.]
- globosus*, Troost. Not defined.
- granuliferus*, Shumard, 1852, Red. Riv. Expl. Louisiana, Kaskaskia Gr. [Sig. bearing granules.]
- hexadactylus*, Lyon & Casseday, 1859, Am. Jour. Sci., vol. 29, Kaskaskia Gr. [Sig. six-fingered.]
- hoveyi*, see Barycrinus *hoveyi*.

- incipiens, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. a beginning.]
- inflatus*, Troost. Not defined.
- inflexus*, Geinitz, 1866, syn. for *Poteriocrinus hemisphericus*.
- insperatus*, Lyon, 1860, Trans. Am. Phil. Soc., vol. 13, Low. Carb. [Sig. unexpected.]
- intermedius*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. intermediate.]
- iowensis*, Owen & Shumard, 1850, Jour. Acad. Nat. Sci., 2d ser., vol. 2, Burlington Gr. [Ety. proper name.]
- kelloggi*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Keokuk Gr. [Ety. proper name.]
- laeviculus*, Lyon, 1861, Proc. Acad. Nat. Sci. Phil., Up. Held. Gr. [Sig. nearly smooth.]
- latus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. wide.]
- lamellosus*, White, 1863, Jour. Bost. Soc. Nat. Hist., vol. 7, Burlington Gr. [Sig. in very thin plates.]
- lyoni*, Hall, 1861, Desc. New Crinoidea, Warsaw Gr. [Ety. proper name.]
- macropleurus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. long-sided.]
- magister*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. the master, chief.]
- magnoliiformis*, see *Zeacrinus magnoliiformis*.
- malvaceus*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. mallow-shaped.]
- maniformis*, see *Zeacrinus maniformis*.
- multibrachiatus*, Lyon & Caseday, 1859, Am. Jour. Sci., vol. 28, Warsaw Gr. [Sig. many-armed.]
- ornatissimus*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Portage Gr. [Sig. highly ornamented.]
- parvibrachiatus*, Hall, 1861, Desc. New Crinoidea, Keokuk Gr. [Sig. small-armed.]
- pentalobus*, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Sig. five-lobed.]
- planus*, Troost. Not defined.
- polyxo*, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Ety. mythological name.]
- poterium*, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. a drinking vessel, a goblet.]
- protuberans*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. protuberant.]
- pusillus*, Hall, 1863, Trans. Alb. Inst. vol. 4, Niagara Gr. [Sig. very small.]
- pyriformis*, Murchison, Sil. Researches, 1839, as identified by Hall, but described by Conrad as *Ichthyocrinus laevis*.
- quintelobus*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. five-lobed.]
- rarus*, Lyon, 1860, Trans. Am. Phil. Soc., vol. 13, Low. Carb. [Sig. rare.]
- rigidus*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. rigid, not flexible.]
- robustus*, Troost. Not defined.
- roemeri*, Troost. Not defined.
- rotundatus*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. rounded.]
- saffordii*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Ety. proper name.]
- sangamonensis*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Up. Coal Meas. [Ety. proper name.]
- scitulus*, syn. for *C. sculptilis*.
- sculptilis*, Hall, 1860, Supp. to Geo. Rep. Iowa, Burlington Gr. [Sig. carved, engraved.]
- sculptus*, Troost. Not defined.
- solidus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. solid, dense, compact.]
- spurius*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. spurious.]
- stellatus*, Troost, 1850, Cat. Crin. Proc. Am. Assoc., Ad. Sci., Keokuk Gr. [Sig. glittering with stars.]
- subtundus*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Warsaw Gr. [Sig. somewhat tumid.]
- tennesseee*, Troost. Not defined.
- tenuidactylus*, Meek & Worthen, 1868, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. slender-fingered.]
- thomae*, see *Barycrinus thomae*.
- tiariformis*, see *Ichthyocrinus tiariformis*.
- tumidus*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. tumid, or as if swollen.]
- viminalis*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. rod-like.]
- waukoma*, Hall, 1864, 20th Reg. Rep., Niagara Gr. [Ety. proper name.]
- wortheni*, Lyon, 1861, Proc. Acad. Nat. Sci. Phil., Up. Held. Gr. [Ety. proper name.]
- wachsmuthi*, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. proper name.]
- Cyclaster*, Billings, 1857, Rep. of Progr. This name was preoccupied. See *Edrioaster*.
- bigsbyi*, see *Edrioaster bigsbyi*.
- CYCLOCYSTOIDES*, Billings & Salter, 1858, Can. Org. Rem., Decade 3. [Ety. *kuklos*, a circle; *kustis*, a bladder; *eidōs*, form.]
- anteceptus*, Hall, 1866, Pamphlet, Trenton & Hud. Riv. Gr. [Sig. anticipated, comprehended before.]
- halli*, Billings, 1858, Can. Org. Rem., Decade 3, Trenton Gr. [Ety. proper name.]
- huronensis*, Billings, 1865, Pal. Foss. vol. 1, Hud. Riv. Gr. [Ety. proper name.]
- salteri*, Hall, 1866, Pamphlet, Trenton Gr. [Ety. proper name.]
- CYSTOCRINUS*, Roemer, 1860, Sil. Fauna. West Tenn. [Ety. *kustis*, a bladder; *krinon*, a lily.]

- tennesseensis, Roemer, 1860, Sil. Fauna. West Tenn., Niagara Gr. [Ety. proper name.]
- Cytocrinus*, Roemer, 1860, Sil. Fauna. West Tenn. Syn. for *Macrostylocrinus*.
- lævis*, see *Macrostylocrinus lævis*.
- Demonocrinites*, Troost. Not defined.
- Decadactylocrinites*, Owen. Not defined.
- DENDROCRINUS**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *dendron*, a tree; *krinon*, a lily.]
- acutidactylus*, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. sharp-fingered.]
- angulatus*, see *Palæocrinus angulatus*.
- caduceus*, Hall, 1866, Pamphlet, Cin'ti Gr. [Sig. the herald's staff.]
- casii*, Meek, 1871, Am. Jour. Sci., 3d ser., vol. 2, Cin'ti Gr. [Ety. proper name.]
- cincinnatiensis*, Meek, 1872, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Ety. proper name.]
- conjugans*, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. joined, united.]
- cylindricus*, Billings, 1859, Can. Org. Rem., Decade 4, Trenton Gr. [Sig. cylindrical.]
- dyeri*, Meek, 1872, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Ety. proper name.]
- gregarius*, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. occurring in flocks or masses.]
- humilis*, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. small.]
- jewetti*, Billings, 1859, Can. Org. Rem., Decade 4, Trenton Gr. [Ety. proper name.]
- latibrachiatus*, Billings, 1857, Rep. of Progr., Hud. Riv. Gr. [Sig. wide-armed.]
- longidactylus*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. long-fingered.]
- modestus*, Safford, 1869, Geo. of Tenn. Not defined.
- nucleus*, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. a kernel.]
- oswegoensis*, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Cin'ti Gr. [Ety. proper name.]
- polydactylus*, Shumard, 1857, (*Homocrinus polydactylus*) Trans. St. Louis Acad. Sci., Cin'ti Gr. [Sig. many-fingered.]
- posticus*, Hall, 1866, Pamphlet, Cin'ti Gr. [Sig. behind, posterior.]
- proboscidiatus*, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. having a proboscis.]
- rusticus*, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. rustic, coarse, rough.]
- similis*, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. similar to *D. acutidactylus*, and *D. proboscidiatus*.]
- tener*, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. delicate.]
- DICHOGRINUS**, Munster, 1839, Beiträg. Zur. Petref. [Ety. *dicha*, in two parts; *krinon*, a lily.]
- angustus*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. narrow.]
- chesterensis*, see *Pterotocrinus chesterensis*.
- constrictus*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., St. Louis Gr. [Sig. constricted.]
- conus*, Meek & Worthen, 1860, Proc. Acad. Sci. Phil., Burlington Gr. [Sig. a cone.]
- cornigerus*, see *Pterotocrinus cornigerus*.
- crassitestus*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. like a thick vessel or pot lid.]
- crassus*, see *Pterotocrinus crassus*.
- dichotomus*, Hall, 1860, Supp. to Geo. Rep. Iowa, Warsaw Gr. [Sig. dividing into two.]
- elegans*, Casseday & Lyon, 1860, Proc. Am. Acad. Arts & Sci., vol. 5, Kaskaskia Gr. [Sig. elegant.]
- expansus*, Meek & Worthen, 1868, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. spread out.]
- ficus*, Casseday & Lyon, 1860, Proc. Am. Acad. Arts & Sci., vol. 5, Keokuk Gr. [Sig. a fig.]
- lachrymosus*, Hall, 1860, Supp. to Geo. Rep. Iowa, Burlington Gr. [Sig. full of tears.]
- lævis*, Hall, 1860, Supp. Geo. Rep. Iowa, Burlington Gr. [Sig. smooth.]
- lineatus*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. marked with lines.]
- liratus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. lined, furrowed.]
- ovatus*, Owen & Shumard, 1850, Jour. Acad. Nat. Sci., 2d ser., vol. 2, Burlington Gr. [Sig. egg-shaped.]
- pisum*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. a pea.]
- plicatus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. plaited.]
- pocillum*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. a little cup.]
- polydactylus*, Casseday & Lyon, 1860, Proc. Am. Acad. Arts & Sci., vol. 5, Keokuk Gr. [Sig. many-fingered.]
- protuberans*, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Sig. protuberant.]
- scitulus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. handsome, neat.]
- sculptus*, Casseday & Lyon, 1860, Proc. Am. Acad. Arts & Sci., vol. 5, Keokuk Gr. [Sig. engraved.]
- sexlobatus*, see *Pterotocrinus sexlobatus*.
- simplex*, Shumard, 1857, Trans. St. Louis Acad. Sci., Warsaw Gr. [Sig. simple.]
- striatus*, Owen & Shumard, 1850, Jour. Acad. Nat. Sci., 2d ser., vol. 2, Burlington Gr. [Sig. striated.]
- symmetricus*, Casseday & Lyon, 1860, Proc. Am. Acad. Arts & Sci., vol. 5, Kaskaskia Gr. [Sig. symmetrical.]

- DICTYOCRINUS**, Conrad, 1841, (*Dictuocrinites*) Ann. Rep. N. Y. [Ety. *dictyon*, a net; *krinon*, a lily.]  
*squamifer*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. scale-bearing.]
- DOLATOCRINUS**, Lyon, 1857, Geo. Sur. Ky., vol. 3. [Ety. *dolatus*, hewn or tooled; *krinon*, a lily.]  
*glyptus*, Hall, 1862, (*Cacabocrinus glyptus*) 15th Reg. Rep., Ham. Gr. [Sig. sculptured.]  
*glyptus var. intermedius*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. intermediate.]  
*lacus*, Lyon, 1857, Geo. Sur. Ky., vol. 3, Corniferous Gr. [Sig. a tub, a vat, a basin.]  
*lamellosus*, Hall, 1862, (*Cacabocrinus lamellosus*) 15th Reg. Rep. N. Y., Up. Held. Gr. [Sig. in very thin plates.]  
*liratus*, Hall, 1862, (*Cacabocrinus liratus*) 15th Reg. Rep. N. Y., Ham. Gr. [Sig. furrowed.]  
*liratus var. multilira*, Hall, 1862, *Cacabocrinus liratus var. multilira* 13th Reg. Rep. N. Y., Ham. Gr. [Sig. many-furrowed.]  
*marshi*, Lyon, 1860, Trans. Am. Phil. Soc., Devonian. [Ety. proper name.]  
*speciosus*, Hall, 1862, (*Cacabocrinus speciosus*) 15th Reg. Rep. N. Y., Up. Held. Gr. [Sig. beautiful.]  
*troosti*, Hall, 1862, (*Cacabocrinus troosti*) 15th Reg. Rep. N. Y., Ham. Gr. [Ety. proper name.]
- Donacrinites*, Troost. Not defined.  
*simplex*, Troost. Not defined.
- DORYCRINUS**, Roemer, 1853, Wieg. Arch. [Ety. *dory*, a spear; *krinon*, a lily.]  
*canaliculatus*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci., Burlington Gr. [Sig. channeled.]  
*cornigerus*, Hall, 1858, (*Actinocrinus cornigerus*) Geo. Rep. Iowa, Burlington Gr. [Sig. horned.]  
*desideratus*, Hall, 1861, (*Actinocrinus desideratus*) Desc. New Crinoidea, Burlington Gr. [Sig. wished for, desirable.]  
*divaricatus*, Hall, 1860, (*Actinocrinus divaricatus*) Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. wide apart.]  
*gouldi*, Hall, 1858, (*Actinocrinus gouldi*) Geo. Rep. Iowa, Keokuk Gr. [Ety. proper name.]  
*kelloggi*, Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Ety. proper name.]  
*mississippiensis*, Roemer, 1853, Archiv. fur Nat., Jahr. 19, Keokuk Gr. [Ety. proper name.]  
*mississippiensis var. spiniger*, Hall, 1860, Supp. to Geo. Sur. Iowa, Keokuk Gr. [Sig. spiny.]  
*missouriensis*, Shumard, 1858, (*Actinocrinus missouriensis*) Geo. Rep. Mo., Burlington Gr. [Ety. proper name.]
- quinelobus*, Hall, 1860 (*Actinocrinus quinelobus*) Supp. to Geo. Rep. Iowa, Burlington Gr. [Sig. five-lobed.]  
*quinelobus var. intermedius*, Meek & Worthen, 1868, Proc. Acad. Nat. Sci., Burlington Gr. [Sig. intermediate.]  
*roemeri*, Meek & Worthen, 1868, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. proper name.]  
*subaculeatus*, Hall, 1858, (*Actinocrinus subaculeatus*) Geo. Rep. Iowa, Burlington Gr. [Sig. armed with points somewhat sharp.]  
*subturbatus*, Meek & Worthen, 1860, (*Actinocrinus subturbatus*) Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. somewhat top-shaped.]  
*symmetricus*, Hall, 1858, (*Actinocrinus symmetricus*) Geo. Rep. Iowa, Burlington Gr. [Sig. symmetrical.]  
*trinodus*, Hall, 1858, (*Actinocrinus trinodus*) Geo. Rep. Iowa, Burlington Gr. [Sig. three-knobbed.]  
*unicornis*, Owen & Shumard, 1850, (*Actinocrinus unicornis*) Jour. Acad. Nat. Sci. Phil., vol. 2, new ser., Burlington Gr. [Sig. single-horned.]  
*unispinus*, Hall, 1861, (*Actinocrinus unispinus*) Desc. New Crinoidea, Burlington Gr. [Sig. one-spined.]
- ECHINOCYSTITES**, Hall, 1864, 20th Reg. Rep. N. Y. [Ety. *echinos*, the sea urchin; *kustis*, a bladder.]  
*nodosus*, Hall, 1864, 20th Reg. Rep. Niagara Gr. [Sig. knobbed.]
- ECHINOENCRINITES**, Meyer, 1826, Karst. Archiv. Nat., vol. 7. [Ety. *echinos*, the sea urchin; *krinon*, a lily.]  
*anatiformis*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. resembling the barnacle *Anatifa*.] I think this species is not generically distinct from *Lepadocrinus moori*.  
*fenestratus*, Troost. Not defined.
- Echinus drydenensis*, see *Eocidaris drydenensis*.  
*gyracanthus*, see *Tentaculites gyracanthus*.
- EDRIOASTER**, Billings, 1858, Can. Org., Rem. [Ety. *edrion*, a seat; *aster*, a star; in allusion to the sessile condition of the species. This name is a substitute for *Cyclaster*, proposed in 1857, the latter name having been preoccupied.]  
*bigsbayi*, Billings, 1857, (*Cyclaster bigsbayi*) Rep. of Progr., Trenton Gr. [Ety. proper name.]
- EDRIOCRINUS**, Hall, 1859, Pal. N. Y., vol. 3. [Ety. *edrion*, a seat; *krinon*, a lily.]  
*pocilliformis*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. like a little cup.]  
*pyriformis*, Hall, 1862, 15th Reg. Rep. N. Y., Up. Held. Gr. [Sig. pear-shaped.]  
*saccalus*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. a little bag.]

- Eleacrinus*, Roemer, 1852, syn. for *Nucleocrinus*.]  
*kirkwoodensis*, see *Nucleocrinus kirkwoodensis*.  
*verneuili*, see *Nucleocrinus verneuili*.
- ELEUTHEROCRINUS**, Shumard & Yandell, 1856, Proc. Acad. Nat. Sci. Phil., vol. 8. [Ety. *eleutheros*, free; *krinon*, a lily.]  
*cassedayi*, Shumard & Yandell, 1856, Proc. Acad. Nat. Sci. Phil., vol. 8, Up. Held. Gr. [Ety. proper name.]  
*whitfieldi*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Ety. proper name.]
- EOCIDARIS**, Desor, 1858, Synopsis des Echinides Fossiles. [Ety. *eos*, the dawn; *cidaris*, a turban.]  
*drydenensis*, Vanuxem, 1842, (Echinus drydenensis) Geo. Rep. 3rd Dist. N. Y., Chemung Gr. [Ety. proper name.]  
*hallianus*, Geinitz, 1866, Carb. und Dyas. in Neb., Up. Coal Meas. [Ety. proper name.]  
*squamosus*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. scaly.]
- EOCYSTITES**, Billings, 1868, Acad. Geol. [Ety. *eos*, dawn; *kustis*, a bladder.]  
*primævus*, Billings, 1868, Acad. Geol., St. John's Gr. [Sig. in the first period of life.]
- ERETMOCRINUS**, Lyon & Casseday, 1859, Am. Jour. Sci., vol. 28. [Ety. *eremos*, an oar; *krinon*, a lily.]  
*calyculoides*, Hall, 1860, (Actinocrinus calyculoides) Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. like a little cup.]  
*clio*, Hall, 1861, (Actinocrinus clio) Desc. New Crinoidea, Burlington Gr. [Ety. mythological name.]  
*claelia*, Hall, 1861, (Actinocrinus claelia) Desc. New Crinoidea, Burlington Gr. [Ety. mythological name.]  
*magnificus*, Lyon & Casseday, 1859, Am. Jour. Sci., vol. 28, Low. Carb. [Sig. magnificent.]  
*matuta*, Hall, 1861, (Actinocrinus matuta) Desc. New Crinoidea, Burlington Gr. [Ety. *Matuta*, the name of a goddess of the morning.]  
*matuta var. attenuata*, Hall, 1861, (Actinocrinus matuta var. attenuata) Desc. New Crinoidea, Burlington Gr. [Sig. drawn out, attenuated.]  
*remibrachiatus*, Hall, 1861, (Actinocrinus remibrachiatus) Desc. New Crinoidea, Burlington Gr. [Sig. paddle-armed.]  
*verneuillianus*, Shumard, 1855, (Actinocrinus verneuillianus) Geo. Sur. Mo., Burlington Gr. [Ety. proper name.]
- ERISOCRINUS**, Meek & Worthen, 1865, Am. Jour. Sci., vol. 89. [Ety. *eris*, contention; *krinon*, a lily.] The authors have expressed their doubts about this genus, because it is so closely allied to Dr. De Koninck's genus, *Philocrinus*.
- antiquus*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. ancient.]  
*conoideus*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Up. Coal Meas. [Sig. somewhat conical.]  
*nebrascensis*, Meek & Worthen, 1865, Am. Jour. Sci., vol. 89, Up. Coal Meas. [Ety. proper name.] This is regarded as merely a variety of *E. typus*.  
*typus*, Meek & Worthen, 1865, Am. Jour. Sci., vol. 89, Up. Coal Meas. [Ety. type of the genus.]  
*tuberculatus*, see *Eupachyrcrinus tuberculatus*.  
*whitii*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. proper name.]
- EUCALYPTOCRINUS**, Goldfuss, 1826, Petref. Germ. [Ety. *eu*, well; *kalyptos*, covered; *krinon*, a lily.]  
*armosus*, see *Glyptocrinus armosus*.  
*cælatus*, Hall, 1843, (Hypanthocrinites cælatus) Geo. Rep., 4th Dist., N. Y., Niagara Gr. [Sig. carved in relief, sculptured.]  
*chicagoensis*, Winchell & Marcy, 1865, Mem. Bos. Soc. Nat. Hist., Niagara Gr. [Ety. proper name.]  
*conicus*, Troost. Not defined.  
*cornutus*, Hall, 1864, 20th Reg. Rep., Niagara Gr. [Sig. horned.]  
*cornutus var. excavatus*, Hall, 1864, 20th Reg. Rep., N. Y., Niagara Gr. [Sig. hollowed out.]  
*crassus*, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. thick, stout.]  
*decorus*, Phillips, 1839, (Hypanthocrinites decorus) Murch. Sil. Syst., Niagara Gr. [Sig. ornamented in relief.]  
*extensus*, Troost. Not defined.  
*gibbosus*, Troost. Not defined.  
*goldfussi*, Troost. Not defined.  
*laevis*, Troost. Not defined.  
*magnus*, Worthen, 1875, Geo. Sur. Ill., vol. 6, Up. Sil. [Sig. large.]  
*nashville*, Troost. Not defined.  
*obconicus*, Hall, 1864, 20th Reg. Rep., Niagara Gr. [Sig. inversely conical.]  
*ornatus*, Hall, 1861, Rep. of Progr. Sur. of Wis., Niagara Gr. [Sig. adorned.]  
*ovatus*, Troost, as figured by Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. ovate.]  
*papulosus*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. covered with pimples.]  
*phillipsii*, Troost. Not defined.  
*ramifer*, Roemer, 1860, Sil. Fauna. West Tenn., Niagara Gr. [Sig. bearing branches.]  
*splendidus*, Troost, Catal. Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Sig. splendid.]  
*tennessee*, Troost. Not defined.
- EUGASTER**, Hall, 1868, 20th Reg. Rep. [Ety. *euge*, pre-eminent, remarkable; *aster*, a star.]



- logani, Hall, 1868, 20th Reg. Rep., Ham. Gr. [Ety. proper name.]
- EUPACHYCRINUS, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. [Ety. *eu*, very; *pachys*, thick; *krinon*, a lily.]
- bassetti, Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Ety. proper name.]
- boydi, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., Chester Gr. [Ety. proper name.]
- craigi, Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Ety. proper name.]
- fayetteensis, Worthen, 1873, Geo. Sur. Ill., vol. 5, Up. Coal Meas. [Ety. proper name.]
- platybasis, White, 1876, Geo. Uinta Mountains, Low. Aubrey Gr. [Sig. having a flat base.]
- tuberculatus, Meek & Worthen, 1865, (Erisocrinus tuberculatus) Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. tuberculated.]
- verrucosus, White & St. John, 1869, Trans. Chi. Acad. Sci., Coal Meas. [Sig. covered with tubercles.]
- FORBESOCRINUS, DeKoninck & LeHon, 1854, Resch. Crin. Carb. Belg. [Ety. proper name; *krinon*, a lily.]
- agassizi, Hall, 1858 & 1860, Geo. Sur. of Iowa & Supp., Burlington Gr. [Ety. proper name.]
- agassizi var. giganteus, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. very large.]
- asteriformis, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. star-shaped.]
- cestriensis, Hall, 1860, Supp. to Geo. Iowa, Burlington Gr. [Ety. proper name.]
- communis, Hall, 1863, Crin. Waverly sandstone Ohio, Waverly Gr. [Sig. of frequent occurrence.]
- giddingi, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Ety. proper name.]
- juvenis, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. young.]
- kelloggi, Hall, 1863, Crin. Wav. Sands. Ohio, Waverly Gr. [Ety. proper name.]
- lobatus, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. lobate.]
- lobatus var. tardus, Hall, 1863, Crin. Wav. Sands. Ohio, Waverly Gr. [Sig. sluggish.]
- meeki, see Onychocrinus meeki.
- monroensis, see Onychocrinus monroensis.
- multibrachiatus, Lyon & Casseday, 1859, Am. Jour. Sci., vol. 28, Kaskaskia Gr. [Sig. many-armed.]
- norwoodi, see Onychocrinus norwoodi.
- nuntius, see Taxocrinus nuntius.
- pratteni, see Melocrinus pratteni.
- ramulosus, Lyon & Casseday, 1859, Am. Jour. Sci., vol. 28, Kaskaskia Gr. [Sig. full of branches.]
- ramulosus, Hall, 1860, see F. subramulosus.
- saffordi, Hall, 1860, Supp. to Geo. Sur. Iowa, Burlington Gr. [Ety. proper name.]
- semiovatus, see Taxocrinus semiovatus.
- shumardianus, Hall, 1858, Geo. Rep. Iowa, St. Louis Gr. [Ety. proper name.]
- spiniger, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. thorny.]
- subramulosus, Shumard, 1866, (Hall, 1860, F. ramulosus) Supp. to Geo. Sur. Iowa, Burlington Gr. The specific name *ramulosus* being preoccupied Shumard proposed subramulosus, in Trans. St. Louis. Acad. Sci. [Sig. somewhat branchy.]
- thiemi, see Taxocrinus thiemi.
- whitfieldi, see Onychocrinus whitfieldi.
- wortheni, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Ety. proper name.]
- GLYPTASTER, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *glyptos*, sculptured; *aster*, a star.]
- brachiatus, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. having arms.]
- inornatus, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. not adorned.]
- occidentalis, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. western.]
- pentangularis, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Sig. five-cornered; pentagonal.]
- GLYPTOCRINUS, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *glyptos*, sculptured; *krinon*, a lily.]
- armosus, McChesney, 1861, (Eucalyptocrinus armosus) New Pal. Foss., Niagara Gr. [Sig. many-armed.]
- baeri, Meek, 1872, Am. Jour. Sci., 3rd series, vol. 3, Cin'ti Gr. [Ety. proper name.]
- carleyi, Hall, 1862, Trans. Alb. Inst., vol. 4, Niagara Gr. [Ety. proper name.]
- decadactylus, Hall, 1847, Pal. N. Y., vol. 1, Cin'ti Gr. [Ety. ten-fingered, but the fossil has twenty fingers.]
- dyeri, Meek, 1872, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Ety. proper name.]
- fimbriatus, Shumard, 1855, Geo. Rep. Mo., Trenton Gr. [Sig. fringed.]
- fornshelli, S. A. Miller, 1874, Cin. Quar. Jour. Sci., Cin'ti Gr. [Ety. proper name.]
- lacunosus, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. having deep depressions.]
- libanus, Safford, 1869, Geo. of Tenn. Not defined.
- marginatus, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. margined—from the border on the margin of the plates.]
- nealli, Hall, 1866, Pamphlet, Cin'ti Gr. [Ety. proper name.]
- nobilis, Hall, 1861, Rep. of Progr. Sur. of Wis., Niagara Gr. [Sig. remarkable.]
- ornatus, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. adorned.]

- parvus, Hall, 1866, Pamphlet, Cin'ti Gr. [Sig. small.]
- plumosus, Hall, 1843, (Actinocrinus plumosus) Geo. Rep., 4th Dist. N. Y., Clinton Gr. [Sig. feathery.]
- priscus, Billings, 1857, Rep. of Progr. Geo. Sur. Can., Black Riv. & Trenton Gr. [Sig. ancient.]
- quinquepartitus, Billings, 1859, Can. Org. Rem., Decade 4, Trenton Gr. [Sig. five-parted.]
- ramulosus, Billings, 1856, Can. Nat. Geo., vol. 1, Trenton Gr. [Sig. full of little branches.]
- shafferi, S. A. Miller, 1875, Cin. Quar. Jour. Sci., vol. 2, Cin'ti Gr. [Ety. proper name.]
- siphonatus*, Hall, 1861, syn. for *Glyptocrinus armosus*.
- subglobosus, Meek, 1873, Pal. Ohio, vol. 1, Cin'ti Gr. [Sig. somewhat globose.]
- GLYPTOCYSTITES, Billings, 1854, Can. Jour., vol. 2. [Ety. *glyptos*, sculptured; *kustis*, a bladder.]
- forbesi, Billings, 1857, Rep. of Progr. Chazy Gr. [Ety. proper name.]
- gracilis, Billings, 1858, Can. Org. Rem., Decade 3, Trenton Gr. [Sig. slender.]
- logani, Billings, 1857, Rep. of Progress, Trenton Gr. [Ety. proper name.]
- logani var. gracilis, Billings, 1858, Can. Org. Rem., Decade 3, Trenton Gr. [Sig. slender.]
- multioporus, Billings, 1854, Can. Jour., vol. 2, Trenton Gr. [Sig. having many passages.]
- GOMPHOCYSTITES, Hall, 1864, 20th Reg. Rep. [Ety. *gomphos*, nail or rudder; *kustis*, a bladder.]
- clavus, Hall, 1864, 20th Reg. Rep., Niagara Gr. [Sig. a club.]
- glans, Hall, 1864, 20th Reg. Rep., Niagara Gr. [Sig. an acorn.]
- tenax, Hall, 1864, 20th Reg. Rep., Niagara Gr. [Sig. holding on—the arm plates appear to have been fringed with tentacles.]
- GONIASTEROIDOCRINUS, Lyon & Casseday, 1859, Am. Jour. Sci., vol. 28. [Ety. like the recent genus *Goniaster*; *krinon*, a lily.]
- fiscellus, Meek & Worthen, 1861, (Trematocrinus fiscellus) Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. a small basket made of twigs.]
- obovatus, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. egg-shaped, with large end uppermost.]
- papillatus, Hall, 1860, (Trematocrinus papillatus) Supp. to Geo. Rep. Iowa, Burlington Gr. [Sig. bud-shaped.]
- reticulatus, Hall, 1861, (Trematocrinus reticulatus) Desc. New Crinoidea, Burlington Gr. [Sig. reticulated.]
- robustus, Hall, 1860, (Trematocrinus robustus) Supp. to Geo. Rep. Iowa, Keokuk Gr. [Sig. robust.]
- spinigerus, Hall, 1862, (Trematocrinus spinigerus) 15th Reg. Rep. N. Y., Ham. Gr. [Sig. bearing spines.]
- tenuiradiatus, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. slenderly rayed.]
- tuberculosis, Hall, 1860, (Trematocrinus tuberculosis) Supp. to Geo. Rep. Iowa, Burlington Gr. [Sig. covered with tubercles.]
- tuberosus, Lyon & Casseday, 1859, Am. Jour. Sci., vol. 28, Kaskaskia Gr. [Sig. knobby.]
- typus, Hall, 1860, (Trematocrinus typus) Supp. to Geo. Rep. Iowa, Burlington Gr. [Sig. the type—the type of the genus *Trematocrinus*.]
- GRANATOCRINUS, Troost, 1850, Cat. Foss., and described by Hall, 1862, 15th Reg. Rep. N. Y. [Ety. *granatos*, granular; *krinon*, a lily.]
- cidariformis*, Troost. Not defined.
- cornutus, Meek & Worthen, 1861, (Pentremites cornutus) Proc. Acad. Nat. Sci. Phil., St. Louis Gr. [Ety. from the horn-like interradial pieces.]
- curtus, Shumard, 1855, (Pentremites curtus) Geo. Rep. Mo., Warsaw Gr. [Sig. short.]
- glaber, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., St. Louis Gr. [Sig. smooth.]
- granulatus, Roemer, 1852, (Pentremites granulatus) Monog. Blast., Warsaw Gr. [Sig. granulated.]
- granulosus, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. covered with small granules.]
- lotoblastus, White, 1874, Rep. Invert. Foss., Low. Carb. [Ety. *lotos*, the *Lotos* plant; *blastos*, a bud.]
- melo, Owen & Shumard, 1850, (Pentremites melo) Jour. Acad. Nat. Sci. Phil., 2d ser., vol. 2, Burlington Gr. [Sig. a melon.]
- melo* var. *projectus*, see *Granatocrinus projectus*.
- melonoides, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington, Gr. [Sig. resembling a melon.]
- missouriensis, Shumard, 1866, Trans. St. Louis Acad. Sci., Chemung Gr. [Ety. proper name.]
- neglectus, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. overlooked.]
- norwoodi, Owen & Shumard, 1850, (Pentremites norwoodi) Jour. Acad. Nat. Sci. Phil., 2d series, vol. 2, Burlington Gr. [Ety. proper name.]
- pisum, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. a pea.]
- projectus, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. projected, thrown out.]

- roemeri, Shumard, 1855, (Pentremites roemeri) Geo. Rep. Mo., Chemung Gr. [Ety. proper name.]
- sayi, Shumard, 1855, (Pentremites sayi) Geo. Rep. Mo., Burlington Gr. [Ety. proper name.]
- shumardi, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. proper name.]
- GRAPHIOCRINUS, De Koninck & Le Hon, 1854, Rech. Crin. Carb. Belg. [Ety. *graphion*, writing instrument; *krinon*, a lily.]
- brachialis, Lyon, 1857, Geo. Sur. Ky., vol. 3, Low. Carb. [Sig. having arms.]
- dactylus, Hall, 1860, Supp. to Geo. Rep. Iowa, St. Louis Gr. [Sig. fingered.]
- quatuordecembrachialis, Lyon, 1857, Geo. Sur. Ky., vol. 3, Burlington Gr. [Sig. having fourteen arms.]
- HADROCRINUS, Lyon, 1869, Trans. Am. Phil. Soc., vol. 13. [Ety. *adros*, full grown; *krinon*, a lily.]
- discus, Lyon, 1869, Trans. Am. Phil. Soc., vol. 13, Devonian. [Sig. a dish.]
- pentagonus, Lyon, 1869, Trans. Phil. Soc., vol. 13, Devonian. [Sig. pentagonal.]
- plenissimus, Lyon, 1869, Trans. Phil. Soc., vol. 13, Devonian. [Sig. the largest.]
- HAPLOCINUS, Steininger, Bul. Soc. Geol. France t. 8, 1st series. [Ety. *haploos*, simple; *krinon*, a lily.]
- clio, Hall, 1862, 15th Reg. Rep. N. Y., Marcellus shale. [Ety. mythological name.]
- granulatus*, Troost. Not defined.
- hemisphericus*, Troost. Not defined.
- maximus*, Troost. Not defined.
- ovalis*, Troost. Not defined.
- HEMICOSMITES, Von Buch, 1840, Monatsber d. Berlin Akad. [Ety. *hemi*, half; *cosmites*, sphere.]
- subglobosus, Hall, 1864, in 20th Reg. Rep., Niagara Gr. [Sig. somewhat globose.]
- HEMICYSTITES, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *hemi*, half; *kustis*, a bladder.]
- altus*, a synonym for *H. granulatus*.
- granulatus, Hall, 1872, Pamphlet, Cin'ti Gr. [Ety. from the granulated appearance of the upper surface.]
- parasiticus, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. parasitic.]
- stellatus, Hall, 1866, Pamphlet, Cin'ti Gr. [Sig. star-shaped.]
- HETEROCRINUS, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *heteros*, irregular; *krinon*, a lily.]
- articulosus, Billings, 1859, Can. Org. Rem., Decade 4, Trenton Gr. [Sig. full of joints.]
- canadensis, Billings, 1859, Can. Org. Rem., Decade 4, Trenton Gr. [Ety. proper name.] This species can hardly be separated from *H. simplex*, by specific differences, and it is doubtful whether it constitutes more than a variety.
- constrictus, Hall, 1866, Pamphlet, Cin'ti Gr. [Sig. constricted.]
- constrictus var. compactus, Meek, 1873, Ohio Pal., vol. 1, Cin'ti Gr. [Sig. compact.]
- crassus, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Ety. from the thick arm plates.]
- exilis, Hall, 1866, Pamphlet, Trenton & Hud. Riv. Gr. [Sig. small, slender.]
- exiguus*, syn. for *H. exilis*.
- gracilis, Hall, 1847, Pal. N. Y., vol. 1. Hud. Riv. Gr. [Sig. slender.]
- heterodactylus, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. irregularly fingered.]
- inaequalis, Billings, 1859, Can. Org. Rem., Decade 4, Trenton Gr. [Sig. unequal.]
- incurvus*, see *Anomalocrinus incurvus*.
- isodactylus*, syn. for *Heterocrinus constrictus* var. compactus.
- juvenis, Hall, 1866, Pamphlet, Cin'ti Gr. [Sig. young.]
- laxus, Hall, 1866, Pamphlet, Trenton & Hud. Riv. Gr. [Sig. loose.]
- polyzo*, syn. for *H. subcrassus*.
- simplex, Hall, 1847, Pal. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Sig. simple.]
- simplex var. grandis, Meek, 1873, Pal. Ohio, vol. 1, Cin'ti Gr. [Sig. great.]
- subcrassus, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Sig. somewhat like *H. crassus*.]
- tenuis, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. slender.]
- HETEROCYSTITES, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *heteros*, irregular; *kustis*, a bladder.]
- armatus, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. having arms.]
- HOLOCYSTITES, Hall, 1864, in 20th Reg. Rep. [Ety. *holos*, entire; *kustis*, a bladder.]
- abnormis, Hall, 1864, in 20th Reg. Rep., Niagara Gr. [Sig. abnormal, out of the usual order.]
- alternatus, Hall, 1861, (Caryocystites alternatus) Rep. of Prog. Geo. Sur. Wis., Niagara Gr. [Ety. from the alternating plates.]
- cylindricus, Hall, 1861, (Caryocystites cylindricus) Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Sig. cylindrical.]
- ovatus, Hall, 1864, in 20th Reg. Rep., Niagara Gr. [Sig. egg-shaped.]
- scutellatus, Hall, 1864, in 20th Reg. Rep., Niagara Gr. [Sig. a salver or waiter of a nearly square form.]
- sphaericus, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist., vol. 1, Niagara Gr. [Sig. round-bodied.]
- winchelli, Hall, 1864, in 20th Reg. Rep., Niagara Gr. [Ety. proper name.]
- HOMOCRINUS, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *homos*, like; *krinon*, a lily.]
- alternatus, Hall, 1847, (Poteriocrinus alternatus) Pal. N. Y., vol. 1, Trenton Gr. [Sig. from the alternating plates.]

- angustus, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Sig. narrowed, contracted.]
- cylindricus, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. cylindrical.]
- gracilis, Hall, 1847, (Poteriocrinus gracilis) Pal. N. Y., vol. 1, Trenton Gr. [Sig. slender.]
- parvus, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. small.]
- polydactylus, see Dendrocrinus polydactylus.
- proboscoidialis, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Ety. from the proboscis.]
- scoparius, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. a sweeper.]
- HYBOCRINUS, Billings, 1857, Rep. of Progr. [Ety. *hubos*, hump-backed; *krinon*, a lily.]
- conicus, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. conical.]
- pristinus, Billings, 1859, Decade 4, Chazy Gr. [Sig. primitive, early.]
- tumidus, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. tumid, swollen out.]
- Hydreionocrinus* (?) *verrucosus*, White & St. John, 1868, Trans. Chi. Acad. Sci. See Eupachyocrinus verrucosus.
- Hypanthocrinites*, Phillips, 1839, Murch. Sil. Syst. [Ety. *upo*, under; *anthos*, a flower; *krinon*, a lily.]
- cælatus*, see Eucalyptocrinus cælatus.
- decorus*, see Eucalyptocrinus decorus.
- ICHTHYOCRINUS, Conrad, 1842, Jour. Acad. Nat. Sci. Phil., vol. 8. [Ety. *ichthys*, a fish; *krinon*, a lily.]
- burlingtonensis, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Ety. proper name.]
- clintonensis, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Ety. proper name.]
- corbis, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Sig. a basket.] Prof. Hall regards this as a syn. for I. subangularis.
- laevis, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Niagara Gr. [Sig. smooth.]
- subangularis, Hall, 1862, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. somewhat angular.]
- tiariformis, Troost, 1850, (Cyathocrinus tiariformis) Catal. Low. Carb. [Sig. like a turban.]
- Icosidactylocrinites*. Not defined.
- LAMPTEROCRINUS, Roemer, 1860, Sil. Fauna West Tenn. [Ety. *lampter*, a lamp; *krinon*, a lily.]
- inflatus, Hall, 1861, (Balanocrinus inflatus) Rep. of Progr. Sur. of Wis., Niagara Gr. [Sig. inflated.]
- sculptus*, syn. for L. tennesseensis.
- tennesseensis, Roemer, 1860, Sil. Fauna West Tenn., Niagara Gr. [Ety. proper name.]
- LECANOCRINUS, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *lekane*, a basin, from the bowl-shaped form of the calyx in the typical species; *krinon*, a lily.]
- caliculus, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. a little cup.]
- elegans, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. elegant.]
- laevis, Billings, 1857, Rep. of Progress, Trenton Gr. [Sig. smooth.]
- macropetalus, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. having long-flower leaves; from the wide scapular plates.]
- ornatus, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. adorned.]
- pusillus*, syn. for Cyathocrinus pusillus.
- simplex, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. simple.]
- LEPADOCRINUS, Conrad, 1840, Ann. Rep. N. Y. [Ety. from the resemblance to the Lepas or Barnacle *Anatifa*; *krinon*, a lily.]
- gebhardi, Conrad, 1840, Ann. Rep. N. Y., Low. Held. Gr. [Ety. proper name.]
- moorii, Meek, 1871, (Lepocrinites moorii) Am. Jour. Sci., 3rd ser., vol. 2, Cin'ti Gr. [Ety. proper name.] I think this species is not generically distinct from Echino-encrinites anatiformis.
- LEPIDECHINUS, Hall, 1861, Desc. New Spec. Crinoidea. [Ety. *lepis*, scale; *echinus*, the sea urchin.]
- imbricatus, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. imbricated.]
- rarispinus, Hall, 1867, 20th Reg. Rep., Chemung Gr. [Sig. having few spines.]
- LEPIDESTHES, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3. [Ety. *lepis*, a scale; *esthes*, a garment.]
- coreyi, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Keokuk Gr. [Ety. proper name.]
- Lepidocidaris*, Meek & Worthen, 1873, Geo. Sur. Ill., vol. 5. A proposed subgenus of Eocidaris.
- Lepidodiscus*, Meek & Worthen, 1873, Geo. Sur. Ill., vol. 3. [Ety. *lepis*, a scale; *diskos*, a quoit.] A proposed subgenus of Agelacrinus.
- Lepocrinites*, Conrad, 1840. The correct orthography seems to be Lepadocrinus.
- moorei*, Meek, see Lepadocrinus moorii.
- LICHENOCRINUS, Hall, 1866, Pamphlet. [Ety. *lichen*, a tree moss; *krinon*, a lily.]
- crateriformis, Hall, 1866, Pamphlet, Trenton & Hud. Riv. Gr. [Sig. having the form of a cup.]
- dyeri, Hall, 1866, Pamphlet, Cin'ti Gr. [Ety. proper name.]
- tuberculatus, S. A. Miller, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Ety. from the tuberculated plates.]

- LYRIOCRINUS**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *lyrion*, small lyre, a musical instrument; *krinon*, a lily.]
- dactylus**, Hall, 1843, (Marsupiocrinites (?) dactylus) Geo. Rep. 4th Dist. N. Y., Niagara Gr. [Sig. fingered.]
- sculptilis**, Hall, 1864, 20th Reg. Rep., Niagara Gr. [Sig. produced by carving.]
- MACROSTYLOCINUS**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *makros*, long; *stylos*, an arm; *krinon*, a lily.]
- lævis**, Roemer, 1860, (Cytocrinus lævis) Sil. Faun. West Tenn., Niagara Gr. [Sig. smooth.]
- ornatus**, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. adorned.]
- striatus**, Hall, 1868, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. striated.]
- MALOCYSTITES**, Billings, 1858, Can. Org. Rem. Decade 3. [Ety. *malum*, an apple; *kustis*, a bladder.]
- barrandi**, Billings, 1858, Can. Org. Rem., Decade 3, Chazy Gr. [Ety. proper name.]
- murchisoni**, Billings, 1858, Can. Org. Rem., Decade 3, Chazy Gr. [Ety. proper name.]
- MARIACRINUS**, Hall, 1859, Pal. N. Y., vol. 3. [Ety. *Maria*, Mary—a proper name; *krinon*, a lily.] See also subgenus *Technocrinus*.
- macropetalus**, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. having long flower leaves; from the wide basal and radial plates.]
- nobilissimus**, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. most remarkable.]
- pachydactylus**, Conrad, 1841, (Astrocrinites pachydactylus) Ann. Rep. N. Y., Low. Held. Gr. [Sig. thick-fingered.]
- Syn. (?) for M. polydactylus.**
- paucidactylus**, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. few-fingered.]
- plumosus**, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. feathery.]
- polydactylus**, Bonny, 1837, (Actinocrinus polydactylus) Am. Jour., vol. 31, Up. Sil. [Sig. many-fingered.]
- ramosus**, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. branching.]
- stoloniferus**, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. bearing branches.]
- Marsupiocrinites**, Phillips, 1839, Murch., Sil. Syst. [Sig. a purse or bag; *krinon*, a lily.]
- dactylus**, see *Lyriocrinus dactylus*.
- MEGISTOCRINUS**, Owen & Shumard, 1852, Geo. Sur. Wis., Iowa and Minn. [Ety. *megistos*, very great; *krinon*, a lily.]
- abnormis**, Lyon, 1857, (Actinocrinus abnormis) Geo. Sur. Ky., vol. 3, Up. Held. Gr. [Sig. abnormal.]
- crassus**, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. thick.]
- depressus**, Hall, 1862, 15th Reg. Rep. N. Y., Hamilton Gr. [Sig. depressed.]
- evansi**, Owen & Shumard, 1852, Geo. Sur. Wis., Iowa and Minn., Burlington Gr. [Ety. proper name.]
- farnsworthi**, White, 1876, Proc. Acad. Nat. Sci., Devonian. [Ety. proper name.]
- infelix**, Winchell & Marcy, Mem. Bost. Soc. Nat. Hist., Niagara Gr. Prof. Hall regards this species as the young of *Saccocrinus christyi*. [Sig. miserable.]
- knappi**, Lyon & Casseday, 1861, Proc. Acad. Nat. Sci. Phil., Up. Held. Gr. [Ety. proper name.]
- latus**, Hall, 1858, Geo. of Iowa, Ham. Gr. [Sig. broad.]
- marcouanus**, Winchell & Marcy, see *Saccocrinus christyi*.
- necis**, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Sig. doubtful.] Prof. Hall regards this species as a synonym for *Saccocrinus christyi*.
- olliculus**, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. a little pot.]
- ontario**, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Ety. proper name.]
- parvirostris**, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. small-beaked.]
- plenus**, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. full, large.]
- rugosus**, Lyon & Casseday, 1859, Am. Jour. Sci., vol. 28, Up. Held. Gr. [Sig. rugose.]
- spinosus**, Lyon, 1861, Proc. Acad. Nat. Sci. Phil., Up. Held. Gr. [Sig. covered with spines.]
- spinulosus**, Lyon, 1861, Jour. Acad. Nat. Sci. Phil., Up. Held. Gr. [Sig. covered with little spines.]
- whitii**, Hall, 1861, Jour. Bost. Soc. Nat. Hist., vol. 7, Burlington Gr. [Ety. proper name.]
- MELOCRINUS**, Goldfuss, 1826, Petref. Germ. [Ety. *melo*, a melon; *krinon*, a lily.]
- bainbridgensis**, see *Ctenocrinus bainbridgensis*.
- breviradiatus**, see *Ctenocrinus breviradiatus*.
- nodosus**, Hall, 1861, Geo. Rep. Wis., Devonian. [Ety. *nodosus*, knobbed.]
- obconicus**, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. inversely conical.]
- pratteni**, McChesney, 1860, (Forbesocrinus pratteni) New Pal. Foss., Warsaw Gr. [Ety. proper name.]
- sculptus**, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. engraved, sculptured.]
- verneuili**, Troost, 1850, (Actinocrinus verneuili) Proc. Am. Assoc. Sci., Niagara Gr. [Ety. proper name.]

- MELONITES, Owen & Norwood, 1846, Am. Jour. Sci., 2d series, vol. 2. [Ety. *melon*, a melon; *lithos*, stone.]  
*danæ*, see *Oligoporus danæ*.  
*multioporus*, Owen & Norwood, 1846, Am. Jour. Sci., 2d series, vol. 2, St. Louis Gr. [Sig. having many pores.]  
*stewarti*, Safford, 1869, Geo. of Tennessee, Low. Carb. [Ety. proper name.]
- MESPILOCRINUS, DeKoninck & LeHon, 1854, Rech. Crin., Terr. Carb. Belg. [Ety. *mespilum*, a medlar; *krinon*, a lily.]  
*konincki*, Hall, 1860, Supp. to Geo. Rep. Iowa, Burlington Gr. [Ety. proper name.]  
*scitulus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. handsome, pretty.]
- MYELODACTYLUS, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *myelos*, the inside pith, from the foramen or medullary canal penetrating the column of joints; *dactylus*, a finger.]  
*brachiatus*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. having arms.]  
*convolutus*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. convoluted, rolled as it were together.]
- MYRTILOCRINUS, Sandberger, 1856, Verster Rhein. Schi. Syst. in Nassau. [Ety. *myrtilus*, a myrtle; *krinon*, a lily.]  
*americanus*, Hall, 1862, 15th Reg. Rep. N. Y., Up. Held. [Ety. proper name.]
- NIPTEROCRINUS, Wachsmuth, 1868, Proc. Acad. Nat. Sci. Phil. [Ety. *nipster*, a washing vessel; *krinon*, a lily.]  
*arboreus*, Worthen, 1863, Geo. Sur., Ill., vol. 5, Burlington Gr. [Sig. branched like a tree.]  
*wachsmuthi*, Meek & Worthen, 1868, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. proper name.]
- NUCLEOCRINUS, Conrad, 1842, Jour. Acad. Nat. Sci. Phil., vol. 8. [Ety. *nucleus*, a little nut; *krinon*, a lily.]  
*angularis*, Lyon, 1857, (*Olivanites angularis*) Geo. Sur. Ky., vol. 3, Corniferous Gr. [Sig. angular.]  
*conradi*, Hall, 1862, 15th Reg. Rep. N. Y., Up. Held. Gr. [Ety. proper name.]  
*elegans*, Conrad, 1842, Jour. Acad. Nat. Sci. Phil., Ham. Gr. [Sig. elegant.]  
*hallii*, syn. for *Nucleocrinus elegans*.  
*kirkwoodensis*, Shumard, 1863, Trans. St. Louis Acad. Sci., St. Louis Gr. [Ety. proper name.]  
*lucina*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Ety. mythological name.]  
*verneuili*, Troost, 1841, (*Pentremites verneuili*) 6th Rep. on the Geo. of Tenn., Corniferous Gr. [Ety. proper name.]
- OLIGOPORUS, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil. [Ety. *oligos*, few; *poros*, a passage.]  
*danæ*, Meek & Worthen, 1860, (*Melonites danæ*) Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Ety. proper name.]  
*nobilis*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. remarkable.]  
*Olivanites*, syn. for *Nucleocrinus*.  
*angularis*, see *Nucleocrinus angularis*.  
*verneuili*, see *Nucleocrinus verneuili*.
- ONYCHASTER, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3. [Ety. *onyx*, a claw; *aster*, a star.]  
*barrisi*, Hall, 1861, (*Protaster barrisi*) Desc. New Crinoidea, Burlington Gr. [Ety. proper name.]  
*flexilis*, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Keokuk Gr. [Sig. pliant.]
- ONYCHOCRINUS, Lyon & Casseday, 1859, Am. Jour. Sci., 2d series, vol. 29. [Ety. *onyx*, a claw; *krinon*, a lily.]  
*diversus*, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. separated.]  
*exculptus*, Lyon & Casseday, 1859, Am. Jour. Sci., Keokuk Gr. [Sig. carved-out.]  
*magnus*, Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. large.]  
*meeki*, Hall, 1858, (*Forbesiocrinus meeki*) Geo. Sur. Iowa, Chester Gr. [Ety. proper name.]  
*monroensis*, Meek & Worthen, 1861, (*Forbesiocrinus monroensis*) Proc. Acad. Nat. Sci., Keokuk Gr. [Ety. proper name.]  
*norwoodi*, Meek & Worthen, 1860, (*Forbesiocrinus norwoodi*) Proc. Acad. Nat. Sci., Keokuk Gr. [Ety. proper name.]  
*whitfieldi*, 1858, (*Forbesiocrinus whitfieldi*) Geo. Sur. Iowa, Chester Gr. [Ety. proper name.]
- PACHYCRINUS, Billings, 1859, Decade 4. [Ety. *pachys*, thick; *krinon*, a lily.]  
*crassibasalis*, Billings, 1859, Decade 4, Chazy Gr. [Ety. from the thick basal plates.]
- PALÆASTER, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *palaos*, ancient; *aster*, a star.]  
*antiquatus*, Locke, 1846, (*Asterias antiquata*) Proc. Acad. Nat. Sci. Phil., vol. 3, Cin'ti Gr. [Sig. ancient.]  
*antiquus*, Troost, 1835, (*Asterias antiqua*) Trans. Geo. Soc. Penn., vol. 1, Hud. Riv. Gr. [Sig. ancient.]  
*dyeri*, Meek, 1872, Am. Jour. Sci., 3rd series, vol. 3, Cin'ti Gr. [Ety. proper name.]  
*eucharis*, Hall, 1868, 20th Reg. Rep., Ham. Gr. [Sig. very graceful.]  
*granulosus*, Hall, 1868, 20th Reg. Rep., Cin'ti Gr. [Sig. granular.]  
*incomptus*, Meek, 1872, Am. Jour. Sci., 3rd ser., vol. 3, Cin'ti Gr. [Sig. undecorated.]  
*jamesi*, Dana, 1863, (*Palæasterina* (?) *jamesi*) Am. Jour. of Sci., 2d series, vol. 35, Cin'ti Gr. [Ety. proper name.]  
*matutinus*, Hall, 1847, (*Asterias matutina*) Pal. N. Y., vol. 1, Trenton Gr. [Sig. in the morning.]



- parviusculus, Billings, 1860, Can. Nat. & Geo., vol. 5, Mid. Sil. [Sig. very small.]
- niagarensis, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Ety. proper name.]
- pulchellus, see *Stenaster pulchellus*.
- shafferi, Hall, 1868, 20th Reg. Rep., Cin'ti Gr. [Ety. proper name.]
- wilberianus, Meek & Worthen, 1861, (Petraster wilberianus) Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Ety. proper name.]
- PALÆASTERINA**, McCoy, 1851, Brit. Pal. Foss., but first defined by Salter, 1857, Ann. Mag. Nat. Hist. [Ety. *palaaios*, ancient; *aster*, a star; *inus*, resemblance.]
- fimbriata*, see *Schænaster fimbriatus*.
- jamesi*, see *Palæaster jamesi*.
- rigida*, see *Petraster rigidus*.
- rugosa*, Billings, 1857, Rep. of Progr., Hud. Riv. Gr. [Sig. rugose.]
- stellata*, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. star-shaped.]
- PALÆCHINUS**, McCoy, 1844, Carb. Foss., Ireland. [Ety. *palaaios*, ancient; *echinus*, the sea urchin.]
- burlingtonensis*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. proper name.]
- gracilis*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. slender.]
- PALÆOCOMA**, Salter, 1857, Ann. & Mag. Nat. Hist., 2d series, vol. 17. [Ety. *palaaios*, ancient; *coma*, hair.]
- cylindrica*, see *Tæniaster cylindricus*.
- princeps*, Hall, 1868, (Ptilonaster princeps) 20th Reg. Rep. Chemung Gr. [Sig. early, ancient.]
- spinosa*, see *Tæniaster spinosus*.
- PALÆOCRINUS**, Billings, 1859, Decade 4. [Ety. *palaaios*, ancient; *krinon*, a lily.]
- angulatus*, Billings, 1857, (Dendrocrinus angulatus) Rep. of Progr., Trenton Gr. [Sig. cornered, angular.]
- pulchellus*, Billings, 1859, Can. Org. Rem., Decade 4, Trenton Gr. [Sig. minutely pretty.]
- rhombiferous*, Billings, 1859, Can. Org. Rem., Decade 4, Trenton Gr. [Sig. bearing rhombs.]
- striatus*, Billings, 1859, Can. Org. Rem., Decade 4., Chazy Gr. [Sig. striated.]
- sulcatus*, Safford, 1869, Geo. of Tenn. Not defined.
- PALÆOCYSTITES**, Billings, 1858, Can. Org. Rem., Decade 3. [Ety. *palaaios*, ancient; *kustis*, a bladder.]
- chapmani*, Billings, 1858, Can. Org. Rem., Decade 3, Chazy Gr. [Ety. proper name.]
- dawsoni*, Billings, 1858, Can. Org. Rem., Decade 3, Chazy Gr. [Ety. proper name.]
- puleher*, Billings, 1859, Can. Nat. Geo., vol. 4, Chazy Gr. [Sig. beautiful.]
- tenuiradiatus*, Hall, 1847, (Actinocrinus tenuiradiatus) Pal. N. Y., vol. 1, Chazy Gr. [Sig. slender-rayed.]
- Pentacrinus hamptoni*, Emmons, 1842, Geo. Rep. N. Y., Trenton Gr. This is merely the plate of a crinoid column.
- Pentagonites*, proposed by Rafinesque for a crinoid column.
- PENTREMITES**, Say, 1820, Am. Jour. Sci., vol. 2. [Ety. *pente*, five; *remos*, a board or plate.]
- angularis*, Lyon, 1860, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. angular.]
- bipyramidalis*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. doubly-pyramidal.]
- burlingtonensis*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. proper name.]
- calyce*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. a cup.]
- calycinus*, Lyon, 1860, Trans. St. Louis Acad. Sci., Kaskaskia Gr. [Sig. a small cup.]
- cervinus*, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Sig. deer-like.]
- cherokee*, Troost, 1850, Catal. Proc. Am. Assoc. Ad. Sci., Kaskaskia Gr. [Ety. proper name.]
- conoideus*, Hall, 1856, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. shaped like a cone.]
- cornutus*, see *Granatocrinus cornutus*.
- curtus*, see *Granatocrinus curtus*.
- decussatus*, Shumard, 1858, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. cross marked—arranged in pairs that alternately cross each other.]
- elegans*, Lyon, 1860, Trans. St. Louis Acad. Sci., Kaskaskia Gr. [Sig. elegant.]
- elongatus*, Shumard, 1855, Geo. Rep. Mo., Encrinital limestone. [Sig. lengthened.]
- florealis*, Schlotheim, 1820, syn. for *P. godoni*.
- globosus*, Say, as identified by Troost, 1850, probably *Pentremites sulcatus*.
- godoni*, DeFrance, 1818, Dict. Sci. Nat., Kaskaskia Gr. [Ety. proper name.]
- granulatus*, see *Granatocrinus granulatus*.
- grosvenori*, Shumard, 1858, Trans. St. Louis Acad. Sci., Warsaw Gr. [Ety. proper name.]
- koninckianus*, Hall, 1856, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]
- laterniformis*, Owen & Shumard, 1850, Jour. Acad. Nat. Sci., 2d series, vol. 2, Chester Gr. [Sig. lantern-formed.]
- leda*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Ety. mythological name.]
- lineatus*, Shumard, 1858, Trans. St. Louis Acad. Sci., Burlington Gr. [Sig. marked with lines.]
- longicostalis*, Hall, 1860, Supp. to Geo. Iowa, Warsaw Gr. [Sig. long-ribbed.]
- lycorias*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Ety. mythological name.]



- maia, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Ety. mythological name.]  
*melo*, see *Granatocrinus melo*.  
*missouriensis*, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Ety. proper name.]  
*norwoodi*, see *Granatocrinus norwoodi*.  
*obesus*, Lyon, 1857, Geo. Sur. Ky., vol. 3, Kaskaskia Gr. [Sig. fat, plump in form.]  
*obliquatus*, syn. for *P. laterniformis*.  
*ovalis*, Owen. Not defined.  
*pyriformis*, Say, 1825, Jour. Acad. Nat. Sci. Phil., vol. 4, Kaskaskia Gr. [Sig. from the pyriform body.]  
*reinwardti*, Troost, 1835, Trans. Geo. Soc. Penn., vol. 1, Niagara Gr. [Ety. proper name.]  
*robustus*, Lyon, 1860, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. robust.]  
*roemeri*, see *Granatocrinus roemeri*.  
*sayi*, see *Granatocrinus sayi*.  
*sirius*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Ety. *sirius*, the dog star.]  
*stelliformis*, see *Codonites stelliformis*.  
*subconoideus*, Meek, 1872, Hayden's Geo. Rep. Low. Carb. [Sig. somewhat cone-like.]  
*subcylindricus*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Sig. somewhat cylindrical.]  
*subtruncatus*, Hall, 1858, Geo. of Iowa, Ham. Gr. [Sig. somewhat truncated.]  
*sulcatus*, Roemer, 1852, Monog. Blastoid., Kaskaskia Gr. [Sig. furrowed.]  
*symmetricus*, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Sig. symmetrical.]  
*tennesseeca*, Troost. Not defined.  
*troosti*, Shumard, 1866, Trans. St. Louis Acad. Sci., Kaskaskia Gr. [Ety. proper name.]  
*truncatus*, Conrad, 1843, Proc. Acad. Nat. Sci. Phil., Warsaw Gr. [Sig. truncated.]  
*varsouviensis*, Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Ety. proper name.]  
*verneuili*, see *Nucleocrinus verneuili*.  
*whitii*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Ety. proper name.]  
*woodmani*, Meek & Worthen, 1868, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Ety. proper name.]  
*wortheni*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Ety. proper name.]  
**PETRASTER**, Billings, 1858, Can. Org. Rem., Decade 3. [Ety. *petros*, a stone; *aster*, a star.] Prof. Hall regards this genus as a synonym for *Palæaster*.  
*bellulus*, Billings, 1865, Pal. Foss., vol. 1, Niagara Gr. [Sig. pretty.]  
*rigidus*, Billings, 1857, (*Palæasterina rigidus*) Rep. of Progr., Trenton Gr. [Sig. rigid.]  
*wilberianus*, see *Palæaster wilberianus*.  
*Philocrinus*, Koninck, 1863. [Ety. *philos*, favorite; *krinon*, a lily.]  
*pelvis*, Meek & Worthen, 1865, Am. Jour. Sci., 2nd series, vol. 39. Syn. for *Erisocrinus typus*.  
**PHOLIDOCIDARIS**, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil. [Ety. *pholidos*, a scale; *kideris*, a turban.]  
*irregularis*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. irregular.]  
**PHYSETOCRINUS**, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil. [Ety. *physetos*, blown up, inflated; *krinon*, a lily.]  
*asper*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. rough.]  
*dilatatus*, Meek & Worthen, 1869, (*Strotocrinus dilatatus*) Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. spread out.]  
*subventricosus*, McChesney, 1860, (*Actinocrinus subventricosus*) Desc. New Pal. Foss., Burlington Gr. [Sig. somewhat ventricose.]  
**PLATYCRINUS**, Miller, 1821, Nat. Hist., Crinoidea. [Ety. *platys*, flat; *krinon*, a lily.]  
*aequalis*, Hall, 1861, Desc. New Crin., Burlington Gr. [Sig. equal.]  
*americanus*, Owen & Shumard, 1852, Jour. Acad. Nat. Sci., 2d ser., vol. 2, Burlington Gr. [Ety. proper name.]  
*anndixoni*, Troost. Not defined.  
*asper*, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. rough.]  
*bedfordensis*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Erie shales. [Ety. proper name.]  
*brevinodus*, Hall, 1861, Desc. New Crinoidea, Keokuk Gr. [Sig. short-knotted.]  
*burlingtonensis*, Owen & Shumard, 1850, Jour. Acad. Nat. Sci., 2d ser., vol. 2, Burlington Gr. [Ety. proper name.]  
*calyculus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. a little cup.]  
*canaliculatus*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. channeled, grooved.]  
*cavus*, Hall, 1858, Geo. Rep. Iowa, vol. 1, pt. 2, Burlington Gr. [Sig. hollow, concave.]  
*clytis*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. remarkable.]  
*contritus*, Hall, 1863, Crin. Wav. Sands. Ohio, Waverly Gr. [Sig. worn out.]  
*corrugatus*, Owen & Shumard, 1850, Jour. Acad. Nat. Sci. 2d ser., vol. 2, Burlington Gr. [Sig. corrugated, wrinkled.]  
*depressus*, Owen. Not defined.  
*discoideus*, Owen & Shumard, 1850, Jour. Acad. Nat. Sci., 2d series, vol. 2, Burlington Gr. [Sig. quoit-shaped, disc-like.]  
*eboraceus*, Hall, 18 2, 15th Reg. Rep. N. Y., Ham. Gr. [Ety. *eboracum*, Latin name for York.]

- elegans*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. elegant.]
- eminulus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. projecting a little.]
- eriensis*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Ety. proper name.]
- excavatus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. hollowed out.]
- exsertus*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. projecting, thrust forth.]
- georgii*, Hall, 1860, Supp. to Iowa Geo. Rep., Warsaw Gr. [Ety. proper name.]
- glyptus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. sculptured.]
- graphicus*, Hall, 1863, Crin. Wav. Sands. Ohio, Waverly Gr. [Sig. written on.]
- halli*, Shumard, 1866, Trans. St. Louis Acad. Sci., vol. 2, Burlington Gr. [Ety. proper name.]
- haydeni*, Meek, 1872, Hayden's Geo. Rep., Low. Carb. [Ety. proper name.]
- hemisphericus*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci., Phil., Keokuk Gr. [Sig. hemispherical.]
- huntsville*, Troost. Not defined.
- incomptus*, White, 1863, Jour. Bost. Soc. Nat. Hist., vol. 7, Burlington Gr. [Sig. unadorned.]
- inornatus*, syn. for *P. burlingtonensis*.
- insculptus*, Troost. Not defined.
- leai*, Lyon, 1860, Trans. Am. Phil. Soc., Low. Held. Gr. [Ety. proper name.]
- lodensis*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Waverly Gr. [Ety. proper name.]
- montanaensis*, Meek, 1871, Hayden's Geo. Rep. Low. Carb. [Ety. proper name.]
- multibrachiatus*, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil., Warsaw Gr. [Sig. many-armed.]
- niotensis*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Ety. proper name.]
- nodobrachiatus*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. having knotty arms.]
- nodulosus*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. covered with small knots.]
- nucleiformis*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. in the shape of a kernel.]
- olla*, Hall, 1861, Desc. New Crinoidea, but the name was preoccupied and Shumard proposed for the species, *P. halli*.
- ornogramulus*, McChesney, Syn. for *P. americanus*.
- oweni*, Meek & Worthen, 1861, Proc. Acad. Nat. Sci., Phil., Burlington Gr. [Ety. proper name.]
- papillatus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. shaped like a bud.]
- parvinodus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. having small knots.]
- parvulus*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Chester Gr. [Sig. very small.]
- parvus*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. small.]
- penicillus*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., St. Louis Gr. [Sig. a small brush.]
- perasper*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. very rough.]
- pileiformis*, Hall, 1858, Geo. Rep. Iowa, vol. 1, pt. 2, Burlington Gr. [Sig. like a small cap.]
- planus*, Owen & Shumard, 1850, Jour. Acad. Nat. Sci. Phil., 2d ser., vol. 2, Burlington Gr. [Sig. plain, level.]
- plenus*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci., Phil., St. Louis Gr. [Sig. full, large.]
- pleurovimeus*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Ety. *pleuron*, the side; *vimeus*, made of wicker work.]
- plumosus*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. feathery.]
- pocilliformis*, Hall, 1858, Geo. Rep. Iowa, vol. 1, pt. 2, Burlington Gr. [Sig. like a little cup.]
- polydactylus*, Troost. Not defined.
- praematurus*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Sig. premature.]
- prattenianus*, Meek & Worthen, Sept. 1860, Proc. Acad. Nat. Sci., Phil., St. Louis Gr. [Ety. proper name.]
- pumilis*, Hall, 1860, Supp. to Geo. Iowa, Warsaw Gr. [Sig. a dwarf.]
- quinenodus*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. five-noded.]
- ramulosus*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. full of branches.]
- regalis*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. royal, splendid.]
- richfieldensis*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Waverly Gr. [Ety. proper name.]
- saffordi*, Troost, 1850, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Ety. proper name.]
- saræ*, Hall, 1858, Geo. Rep. Iowa, St. Louis Gr. [Ety. proper name.]
- scobina*, Meek & Worthen, 1861, Proc. Acad. Nat. Sci., Phil., Burlington Gr. [Sig. a rasp.]
- sculptus*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. engraved.]
- shumardianus*, Hall, 1858, Geo. Rep. Iowa, vol. 1, pt. 2, Burlington Gr. [Ety. proper name.]
- striobrachiatus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. having striated arms.]

- subspinosus, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. somewhat spiny.]
- subspinulosus, Hall, 1860, Supp. to Geo. Iowa, Burlington Gr. [Sig. somewhat full of little spines.]
- tennesseensis, Roemer, 1860, Sil. Fauna West Tenn., Niagara Gr. [Ety. proper name.]
- tentaculatus, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. having feelers.]
- tenuibrachiatus, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. slender-armed.]
- truncatulus, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. somewhat truncated.]
- truncatus, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. truncated, cut short.]
- tuberosus, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. covered with protuberances.]
- verrucosus, White, 1863, Jour. Bost. Soc. Nat. Hist., vol. 7, Burlington Gr. [Sig. covered with wart-like projections.]
- wortheni, Hall, 1858, Geo. Rep. Iowa, vol. 1, pt. 2, Burlington Gr. [Ety. proper name.]
- yandelli, Owen & Shumard, 1850, Jour. Acad. Nat. Sci., 2d ser., vol. 2, Burlington Gr. [Ety. proper name.]
- PLEUROCYSTITES**, Billings, 1854, Can. Jour., vol. 2. [Ety. *pleuron*, the side; *kustis*, a bladder.]
- anticostiensis, Billings, 1857, Rep. of Progr. Hud. Riv. Gr. [Ety. proper name.]
- elegans, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. elegant.]
- exornatus, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. adorned.]
- flitextus, Billings, 1854, Can. Jour., vol. 2, Trenton Gr. [Sig. woven like thread.]
- robustus, Billings, 1854, Can. Jour., vol. 2, Trenton Gr. [Sig. robust.]
- squamosus, Billings, 1854, Can. Jour., vol. 2, Trenton Gr. [Sig. scaly.]
- POROCRINUS**, Billings, 1857, Rep. of Progr. [Ety. from the poriferous areas similar to the pectinated rhombs of the cystidea.]
- conicus, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. conical.]
- crassus, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Cin'ti Gr. [Sig. thick.]
- pentagonus, Meek & Worthen, 1865, Proc. Acad. Nat. Sci., Phil., Cin'ti Gr. [Sig. five-cornered.]
- POTEROCRINUS**, Miller, 1821, Nat. Hist. Crinoidea. [Ety. *poterion*, a goblet; *krinon*, a lily.]
- aequalis, Hall, 1860, Supp. to Geo. Iowa, Burlington Gr. [Sig. equal.]
- alternatus*, see *Homocrinus alternatus*.
- barrisi, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. proper name.]
- bayensis*, see *Scaphiocrinus bayensis*.
- bisselli, Worthen, 1873, Geo. Sur. Ill., vol. 5, Chester Gr. [Ety. proper name.]
- bursiformis, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. purse-shaped.]
- caduceus*, see *Dendrocrinus caduceus*.
- calyculus, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. a little cup.]
- carbonarius*, see *Scaphiocrinus carbonarius*.
- carinatus, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. keeled.]
- concinus, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. handsome.]
- coreyi, Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Ety. proper name.]
- corycia, Hall, 1863, Crin. Wav. Sands. Ohio, Waverly Gr. [Ety. mythological name.]
- crineus, Hall, 1863, Crin. Wav. Sands. Ohio, Waverly Gr. [Sig. hairy.]
- cultidactylus, Hall, 1860, Supp. to Geo. Iowa, Burlington Gr. [Sig. elegantly fingered.]
- cylindricus, Lyon, 1860, Trans. Am. Phil. Soc., vol. 13, Devonian. [Sig. cylindrical.]
- decadactylus*, see *Scaphiocrinus decadactylus*.
- diffusus, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. spread-out.]
- dilatatus*, see *Coeliocrinus dilatatus*.
- divaricatus, Hall, 1860, Supp. to Geo. Iowa, Warsaw Gr. [Sig. spread-out.]
- enormis*, see *Cyathocrinus enormis*.
- florealis*, see *Zeacrinus florealis*.
- fusiformis, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. spindle-shaped.]
- gracilis*, see *Homocrinus gracilis*.
- hardinensis, Worthen, 1873, Geo. Sur. Ill., vol. 5, St. Louis Gr. [Ety. proper name.]
- hemisphericus, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. hemispherical.]
- hoveyi, Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Ety. proper name.]
- indentus, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. indented.]
- indianensis, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Ety. proper name.]
- keokuk, Hall, 1860, Supp. to Geo. Rep. Iowa, Keokuk Gr. [Ety. proper name.]
- lasallensis, Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Ety. proper name.]
- lepidus, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. elegant.]

*longidactylus*, Shumard, 1855. This name was preoccupied, and the species is now named *P. missouriensis*.  
*macoupinensis*, Worthen, 1873, Geo. Sur. Ill., vol. 5, Up. Coal Meas. [Ety. proper name.]  
*maniformis*, see *Zeacrinus maniformis*.  
*meekianus*, Shumard, 1855, Geo. Rep. Mo., Encrinital limestone. [Ety. proper name.]  
*missouriensis*, Shumard, 1857, Trans. St. Louis Acad. Sci., St. Louis Gr. [Ety. proper name.]  
*montanaensis*, Meek, 1872, Hayden's Geo. Rep., Low. Carb. [Ety. proper name.]  
*municipalis*, Troost. Not defined.  
*nassa*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. a wicker basket with a narrow neck.]  
*nerens*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Ety. mythological name.]  
*norwoodi*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Kaskaskia Gr. [Ety. proper name.]  
*nycteus*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Ety. mythological name.]  
*obuncus*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. bent in, hooked.]  
*occidentalis*, see *Agassizocrinus occidentalis*.  
*perplexus*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci., Phil., Burlington Gr. [Sig. intricate.]  
*pisiformis*, Roemer, 1860, Sil. Fauna West Tenn., Niagara Gr. [Sig. pea-shaped.]  
*pleias*, Hall, 1863, Crin. Wav. Sands. Ohio, Waverly Gr. [Ety. *Pleias*, one of the seven stars, a Pleiad.]  
*posticus*, Hall, 1866, Pamphlet, Cin'ti Gr. [Sig. posterior, the back part.]  
*proboscoidalis*, Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. having a proboscis.]  
*rhombiferus*, Owen & Shumard, 1852, Geo. Sur. Wis., Iowa & Minn., Burlington Gr. [Sig. bearing rhombs.]  
*rugosus*, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. wrinkled.]  
*saliginoides*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. like willow-work.]  
*simplex*, Lyon, 1860, Trans. Am. Phil. Soc. vol. 13, Devonian. [Sig. simple.]  
*solidus*, Meek & Worthen, 1861, Proc. Acad. Nat. Sci., Phil., Burlington Gr. [Sig. solid, compact.]  
*spinus*, see *Zeacrinus spinosus*.  
*subimpressus*, Meek & Worthen, 1861, Proc. Acad. Nat. Sci., Phil., Burlington Gr. [Sig. slightly indented.]  
*subtumidus*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci., Phil., Kaskaskia Gr. [Sig. somewhat swollen or tumid.]

*swallovi*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci., Phil., Burlington Gr. [Ety. proper name.]  
*tenuibrachiatum*, Meek & Worthen, 1861, Proc. Acad. Nat. Sci., Phil., Burlington Gr. [Sig. slender-armed.]  
*tenuidactylus*, see *Scaphiocrinus tenuidactylus*.  
*tumidus*, see *Agassizocrinus tumidus*.  
*vanhornei*, Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Ety. proper name.]  
*ventricosus*, see *Cœliocrinus ventricosus*.  
*verticillus*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. whorled, verticillate.]  
*wachsmuthi*, see *Scaphiocrinus wachsmuthi*.

**PROTASTER**, Forbes, 1849, Mem. Geo. Sur. Great Britain, Decade I. [Ety. *protos*, first; *aster*, star.]  
*barrisi*, see *Onychaster barrisi*.  
*forbesi*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]  
*granuliferus*, Meek, 1872, Am. Jour. Sci., 3rd ser., vol. 3, Cin'ti Gr. [Sig. bearing granules.]  
*gregarius*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. found in flocks.]  
**PTEROTOCRINUS**, Lyon & Casseday, 1860, Am. Jour. Sci., vol. 29. [Ety. *pterotos*, feathered; *krinon*, a lily.]  
*capitalis*, Lyon, 1857, (*Astrocrinus capitalis*) Geo. Sur. Ky., vol. 3, Chester Gr. [Sig. relating to the head.]  
*chesterensis*, Meek & Worthen, 1860, (*Actinocrinus chesterensis*) Proc. Acad. Nat. Sci. Phil., Chester Gr. [Ety. proper name.]  
*cornigerus*, Shumard, 1857, (*Dichocrinus cornigerus*) Trans. St. Louis Acad. Sci. Kaskaskia Gr. [Sig. horned.]  
*coronarius*, Lyon, 1857, (*Asterocrinus coronarius*) Geo. Sur. Ky., vol. 3, Chester Gr. [Sig. wreathed, crowned.]  
*crassus*, Meek & Worthen, 1860, (*Dichocrinus crassus*) Proc. Acad. Nat. Sci. Phil., Chester Gr. [Sig. thick.]  
*depressus*, Lyon & Casseday, 1860, Am. Jour. Sci., vol. 29, Chester Gr. [Sig. depressed.]  
*pyramidalis*, Lyon & Casseday, 1860, Am. Jour. Sci., vol. 29, Kaskaskia Gr. [Sig. pointed like a pyramid.]  
*rugosus*, Lyon & Casseday, 1860, Am. Jour. Sci., vol. 29, Kaskaskia Gr. [Sig. wrinkled.]  
*sexlobatus*, Shumard, 1857, (*Dichocrinus sexlobatus*) Trans. St. Louis Acad. Sci., Kaskaskia, Gr. [Sig. six-lobed.]  
*Ptilonaster*, Hall, 1868, syn. for *Palæocoma*.  
*princeps*, see *Palæocoma princeps*.  
**PYGORHYNCHUS**, Agassiz, 1839. [Ety. *pygos*, solid; *rhynchos*, beak.]  
*gouldi*, Bonve, 1846, Proc. Bost. Soc. Nat. Hist., Kaskaskia (?) Gr. [Ety. proper name.]

- RETIOCRINUS**, Billings, 1858, Can. Org. Rem. Decade 4. [Ety. *retium*, net; *krinon*, a lily.]
- fimbriatus*, Billings, 1859, Can. Org. Rem. Decade 4, Hud. Riv. Gr. [Sig. fringed.]
- stellaris*, Billings, 1859, Can. Org. Rem. Decade 4, Trenton Gr. [Sig. rayed like a star.]
- RHODOCRINUS**, Miller, 1821, Nat. Hist. Crinoidea. [Ety. *rhodon*, a rose; *krinon*, a lily.]
- asperatus*, Billings, 1859, Can. Org. Rem. Decade 4, Chazy Gr. [Sig. made rough, uneven.]
- barrisi*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. proper name.]
- barrisi var. divergens*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. divergent, separating.]
- gracilis*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. slender.]
- halli*, Lyon, 1861, Proc. Acad. Nat. Sci., Phil., Low. Held. Gr. [Ety. proper name.]
- melissa*, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Ety. mythological name.]
- microbasalis*, see *Thysanocrinus microbasalis*.
- nanus*, Meek & Worthen, 1866, Proc. Acad. Nat. Sci., Phil., Burlington Gr. [Sig. dwarfish.]
- nodulosus*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. covered with small knots.]
- pyriformis*, see *Thysanocrinus pyriformis*.
- rectus*, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Sig. straight.]
- spinosus*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. covered with many spines.]
- varsoviensis*, Hall, 1860, Supp. Geo. Rep. Iowa, Warsaw Gr. [Ety. proper name.]
- wachsmuthi*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. proper name.]
- whitii*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. proper name.]
- whitii var. burlingtonensis*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. proper name.]
- wortheni*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Ety. proper name.]
- SACCOCRINUS**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *sakkos*, a bag or sack; *krinon*, a lily.]
- christyi*, Hall, 1863, (*Actinocrinus christyi*) Trans. Alb. Inst., vol. 4, Niagara Gr. This species was called by Winchell & Marcy, 1865, *Megistocrinus marcouanus*, and again by Hall, in 1865, *Saccocrinus whitfieldi*.
- ornatus*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Sig. adorned.]
- semiradiatus*, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Sig. half-rayed.]
- speciosus*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. beautiful.]
- tennesseensis*, Troost, Ms., Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Ety. proper name.]
- whitfieldi*, Hall, 1867, (*Actinocrinus christyi*, 1863) 20th Reg. Rep., Niagara Gr. This name must be regarded as a synonym for *Saccocrinus christyi*, as well as *Megistocrinus marcouanus*, unless the fossil should be referred to the genus *Actinocrinus*, in which case, the specific name *christyi* being preoccupied, *marcouanus* would have the preference.
- SCAPHIOCRINUS**, Hall, 1858, Geo. Rep. Iowa. [Ety. *scaphion*, a skiff; *krinon*, a lily.]
- abnormis*, Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. abnormal.]
- ægina*, Hall, 1863, Desc. New Crin. Waverly sandstone, Waverly Gr. [Ety. mythological name.]
- æqualis*, Hall, 1861, Desc. New Crin., Keokuk Gr. [Sig. equal.]
- bayensis*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Chester Gr. [Ety. proper name.]
- carbonarius*, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil., Up. Coal Meas. [Sig. from the coal measures.]
- carinatus*, Hall, 1861, Desc. New Crin., Burlington Gr. [Sig. keeled.]
- clio*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. mythological name.]
- coreyi*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Ety. proper name.]
- dactyliformis*, Hall, 1858, Geo. Rep. Iowa, St. Louis Gr. [Sig. finger-shaped.]
- decabrachiatus*, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Sig. ten-armed.]
- decadactylus*, Meek & Worthen, 1860, (*Poteriocrinus decadactylus*) Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Ety. ten-fingered.] *P. decadactylus* was preoccupied.
- delicatus*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. delicate.]
- depressus*, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. depressed.]
- dichotomus*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. dividing into two.]
- divaricatus*, Hall, 1860, Supp. to Geol. Iowa, Burlington Gr. [Sig. wide apart.]
- doris*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. mythological name.]
- fiscellus*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. a small basket of woven slender twigs.]
- halli*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. proper name.]

- huntsvillæ, Worthen, 1873, Geo. Sur. Ill., vol. 5, St. Louis Gr. [Ety. proper name.]
- internodius, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Sig. from the length of the joints.]
- juvenis, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. young.]
- liriope, Hall, 1863, (spelled lyriope as published,) Crin. Wav. Sands. Ohio, Waverly Gr. [Ety. mythological name.]
- longidactylus, McChesney, 1860, New Pal. Foss., Kaskaskia Gr. [Sig. long-fingered.]
- macadamsi, Worthen, 1873, Geo. Sur. Ill., vol. 5, Keokuk Gr. [Ety. proper name.]
- macrodactylus, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. long-fingered.]
- nanus, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. dwarfish.]
- nodobrachiatus, Hall, 1861, Desc. New Crinoidea, Warsaw Gr. [Sig. arms nodose.]
- notabilis, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. noteworthy, extraordinary.]
- orbicularis, Hall, 1861, Desc. New Crinoidea, Keokuk Gr. [Sig. orb-shaped.]
- penicillus, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. a little brush.]
- ramulosus, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. full of little branches.]
- randolphensis, Worthen, 1873, Geo. Sur. Ill., vol. 5, Chester Gr. [Ety. proper name.]
- robustus, Hall, 1861, Desc. New Crinoidea, Keokuk Gr. [Sig. robust.]
- rudis, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. rude, rough, coarse.]
- rusticellus, White, 1863, Proc. Bost. Soc. Nat. Hist., vol. 7, Burlington Gr. [Sig. a little rough, rustic.]
- scalaris, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. resembling a ladder.]
- scoparius, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Sig. a sweeper.]
- simplex, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. simple.]
- spinobrachiatus, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. spiny-armed.]
- striatus, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. striated.]
- subcarinatus, Hall, 1863, Crin. Wav. Sands. Ohio, Waverly Gr. [Sig. somewhat keeled.]
- subtortuosus, Hall, 1863, Crin. Wav. Sands., Waverly Gr. [Sig. somewhat twisted.]
- tenuidactylus, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. slender-fingered.]
- tethys, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. mythological name.]
- tortuosus, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. twisted.]
- unicus, Hall, 1861, Desc. New Crinoidea, Keokuk Gr. [Sig. unique.]
- wachsmuthi, Meek & Worthen, 1861, (Poteriocrinus wachsmuthi) Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. proper name.]
- whitii, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Ety. proper name.]
- SHIZOCRINUS, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *schiza*, a cleft, in allusion to the cleft or double interscapular plates; *krinon*, a lily.]
- nodosus, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. knobbed.]
- striatus, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. striated.]
- SCHENASTER, Meek & Worthen, 1866, Geo. Sur. Ill., vol. 2. [Ety. *schoinos*, a rope; *aster*, a star.]
- fimbriatus, Meek & Worthen, 1860, (Palæasterina fimbriatus,) Proc. Acad. Nat. Sci. Phil., St. Louis Gr. [Sig. fringed.]
- wachsmuthi, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. proper name.]
- SCYPHOCRINUS, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *scyphos*, a little cup; *krinon*, a lily.]
- heterocostalis, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Ety. *heteros*, irregular; *costalis*, ribbed.]
- Sphaerocrinus, Meek & Worthen, 1866. The name was preoccupied by Roemer, and the authors substituted *Coelocrinus* for it.
- SPHEROCYSTITES, Hall, 1859, Pal. N. Y., vol. 3. [Ety. *sphaira*, a sphere from the spheroidal form of the body; *kustis*, a bladder.]
- multifasciatus, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. many banded.]
- STEGANOCRINUS, Meek & Worthen, 1866, Geo. Sur. Ill., vol. 2. [Ety. *steganos*, covered; *krinon*, a lily.]
- araneolus, Meek & Worthen, 1860, (Actinocrinus araneolus) Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. a small spider.]
- pentagonus, Hall, 1858, (Actinocrinus pentagonus) Geo. Sur. Iowa, vol. 1, pt. 2, Burlington Gr. [Sig. pentagonal.]
- STENASTER, Billings, 1858, Can. Org. Rem., Decade 3. [Ety. *stenos*, narrow, in allusion to the contracted body; *aster*, a star.]



- grandis*, Meek, 1872, Am. Jour. Sci., 3rd series, vol. 3, Cin'ti Gr. [Sig. great.]  
*huxleyi*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
*pulchellus*, Billings, 1857, (Palæaster pulchella) Rep. of Progr. Trenton Gr. [Sig. minutely beautiful.]  
*salteri*, Billings, 1858, Can. Org. Rem., Decade 3, Trenton Gr. [Ety. proper name.]  
**STEPHANOCRINUS**, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8. [Ety. *stephanos*, a coronet; *krinon*, a lily.]  
*angulatus*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Niagara Gr. [Sig. angular.]  
*gemmaformis*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. bud-shaped.]  
**STROBILOCYSTITES**, White, 1876, Proc. Acad. Nat. Sci.. [Ety. *strobilos*, a pine cone; *kustis*, a bladder.]  
*calvini*, White, 1876, Proc. Acad. Nat. Sci., Devonian. [Ety. proper name.]  
**STROTOCRINUS**, Meek & Worthen, 1866, Geo. Sur. Ill., vol. 2. [Ety. *strotos*, spread; *krinon*, a lily.]  
*ægilops*, Hall, 1860, (Actinocrinus ægilops) Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. a sweet acorn.]  
*asperimus*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. extremely rough.]  
*dilatatus*, see Physetocrinus dilatatus.  
*ectypus*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. engraved in relief, embossed.]  
*glyptus*, Hall, 1860, (Actinocrinus glyptus) Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. sculptured.]  
*insculptus*, Hall, 1861, (Actinocrinus insculptus) Desc. New Crinoidea, Burlington Gr. [Sig. engraved.]  
*liratus*, Hall, 1860, (Actinocrinus liratus) Supp. Iowa Geo. Rep., vol. 1, pt. 2, Burlington Gr. [Sig. furrowed, ridged.]  
*perumbrosus*, Hall, 1860, (Actinocrinus perumbrosus) Supp. to vol. 1, pt. 2, Iowa Geo. Rep., Burlington Gr. [Sig. very shady.]  
*regalis*, Hall, 1860, (Actinocrinus regalis) Supp. to Geo. Rep. Iowa, Burlington Gr. [Sig. regal, splendid.]  
*rudis*, Hall, 1860, (Actinocrinus rudis) Supp. to Geo. Sur. Iowa, Burlington Gr. [Sig. rude.]  
*tenuiradiatus*, Hall, 1861, (Actinocrinus tenuiradiatus) Desc. New Crinoidea, Burlington Gr. [Sig. slender-armed.]  
*tholus*, Hall, 1860, (Actinocrinus tholus) Supp. to Geo. Iowa, Burlington Gr. [Sig. a dome, a rotunda.]  
*umbrosus*, Hall, 1858, (Actinocrinus umbrosus) Geo. Rep. Iowa, vol. 1, pt. 2, Burlington Gr. [Sig. shady, umbrella-like.]  
**SYNBATHOCRINUS**, Phillips, 1836, Geol. York-shire. [Ety. *syn*, together; *baden*, walking; *krinon*, a lily.]  
*brevis*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. short.]  
*dentatus*, Owen & Shumard, 1852, Geo. Sur. Wis., Iowa & Minn., Burlington Gr. [Sig. toothed.]  
*granulatus*, Troost. Not defined.  
*matutinus*, Hall, 1858, Geo. of Iowa, Ham. Gr. [Sig. in the morning.]  
*oweni*, Hall, 1860, 13th Reg. Rep. N. Y., Ham. Gr. [Ety. proper name.]  
*papillatus*, Hall, 1861, Desc. New Crinoidea, Burlington Gr. [Sig. bud-like.]  
*swallowi*, Hall, 1858, Geo. Rep. Iowa, St. Louis Gr. [Ety. proper name.]  
*tennesseeæ*, Troost. Not defined.  
*tennesseensis*, Roemer, 1860, Sil. Fauna West Tenn., Niagara Gr. [Ety. proper name.]  
*robustus*, Shumard, 1866, Trans. St. Louis Acad. Sci., Warsaw Gr. [Sig. robust.]  
*wachsmuthi*, Meek & Worthen, 1866, see Catillocrinus wachsmuthi.  
*wachsmuthi*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. proper name.]  
*wortheni*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Ety. proper name.]  
**SYRINGOCRINUS**, Billings, 1859, Can. Org. Rem., Decade 4. [Ety. *syrinx*, a pipe; *krinon*, a lily.]  
*paradoxicus*, Billings, 1859, Can. Org. Rem., Decade 4, Trenton Gr. [Sig. puzzling, questionable.]  
**TÆNIASTER**, Billings, 1858, Can. Org. Rem., Decade 3. [Ety. *tainia*, a ribbon; *aster*, a star.]  
*cylindrica*, Billings, 1857, (Palæocrinus cylindrica) Rep. of Progr., Trenton Gr. [Sig. cylindrical.]  
*spinosa*, Billings, 1857, (Palæocrinus spinosa) Rep. of Progr., Trenton Gr. [Sig. covered with many spines.]  
**TAXOCRINUS**, Phillips, 1843, Morris Cat. Brit. Foss. [Ety. *taxus*, the yew tree; *krinon*, a lily.]  
*gracilis*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Ham. Gr. [Sig. slender.]  
*interscapularis*, Hall, 1858, Geo. of Iowa, Ham. Gr. [Sig. spaced between the shoulder pieces.]  
*nuntius*, Hall, 1862, (Forbesiocrinus nuntius) 15th Reg. Rep. N. Y., Ham. Gr. [Sig. a messenger, an interpreter.]  
*semiovatus*, Meek & Worthen, 1860, (Forbesiocrinus semiovatus) Proc. Acad. Nat. Sci. Phil., St. Louis Gr. [Sig. half-ovate.]  
*thiemii*, Hall, 1861, (Forbesiocrinus thiemii) Desc. New Crinoidea, Burlington Gr. [Ety. proper name.]  
**TECHNOCRINUS**, Hall, 1859, Pal. N. Y., vol. 3, proposed as a subgenus of Mariocrinus. [Ety. *techné*, art; *krinon*, a lily.]  
*andrewsi*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Ety. proper name.]



- sculptus, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. engraved, sculptured.]
- spinulosus, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. covered with little spines.]
- striatus, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. striated.]
- THYSANOCRINUS, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *thysanos*, fringed; from the fimbriated arms or fingers of the species; *krinon*, a lily.]
- aculeatus, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. armed with sharp points.]
- canaliculatus, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. channeled, grooved.]
- immaturus, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. not mature, not full grown.]
- liliiformis, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. lily-shaped.]
- microbasalis, Billings, 1857, (Rhodocrinus microbasalis) Rep. of Progr., Trenton Gr. [Sig. having a small base.]
- pyriformis, Billings, 1857, (Rhodocrinus pyriformis) Rep. of Progr., Trenton Gr. [Sig. pear-shaped.]
- Trematocrinus*, syn. for Goniasteroidocrinus.
- fiscellus*, see Goniasteroidocrinus *fiscellus*.
- papillatus*, see G. *papillatus*.
- reticulatus*, see G. *reticulatus*.
- robustus*, see G. *robustus*.
- spinigerus*, see G. *spinigerus*.
- tuberculatus*, see G. *tuberculatus*.
- typus*, see G. *typus*.
- VASOCRINUS, Lyon, 1857, Geo. Sur. Ky., vol. 3. [Ety. *vas*, a vessel; *krinon*, a lily.]
- sculptus, Lyon, 1857, Geo. Sur. Ky., vol. 3, Corniferous Gr. [Sig. sculptured.]
- valens, Lyon, 1857, Geo. Sur. Ky., vol. 3, Corniferous Gr. [Sig. strong, vigorous.]
- ZEACRINUS, Troost, Catal. Foss., 1850, and described by Hall, 1858, Geo. Iowa. [Ety. *zea*, indian corn; *krinon*, a lily.]
- acanthophorus, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. spine-bearing.]
- arboreus, Worthen, 1873, Geo. Sur. Ill., vol. 5, St. Louis Gr. [Sig. tree-like.]
- armiger, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., Chester Gr. [Sig. armed.]
- asper, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. rough.]
- bifurcatus, McChesney, 1860, New Pal. Foss., Kaskaskia Gr. [Sig. bifurcated.]
- cariniferus, Worthen, 1873, Geo. Sur. Ill., vol. 5, St. Louis Gr. [Sig. keel-bearing.]
- compactilis, Worthen, 1873, Geo. Sur. Ill., vol. 5, St. Louis Gr. [Sig. compact, pressed together.]
- crassus, Meek & Worthen, 1860, (Cyathocrinus crassus) Proc. Acad. Nat. Sci. Phil., Low. Coal Meas. [Sig. thick.]
- crateriformis*, Troost. Not defined.
- depressus, Troost, as defined by Hall, 1858, Geo. Rep. Iowa, Chester Gr. [Sig. depressed.]
- discus, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Up. Coal Meas. [Sig. a quoit.]
- elegans, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. elegant.]
- florealis, Yandell & Shumard, 1847, (Cyathocrinus florealis) Cont. to Geol. Ky. Kaskaskia Gr. [Sig. flower-like.]
- formosus, Worthen, 1873, Geo. Sur. Ill., vol. 5, Chester Gr. [Sig. beautiful.]
- intermedius, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Sig. intermediate.]
- lyra, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. a lute, a stringed instrument.]
- magnoliaformis, Owen & Norwood, 1846, (Cyathocrinus magnoliaformis) Research Pot. Carb. Rocks Ky., Kaskaskia Gr. [Sig. magnolia-like.]
- maniformis, Yandell & Shumard, 1847, (Poteriocrinus maniformis) Contributions to the Geo. of Ky., Kaskaskia Gr. [Sig. like a hand.]
- merope, Hall, 1863, Extract from 17th Reg. Rep. N. Y., Waverly Gr. [Ety. mythological name.]
- mucrospinus, McChesney, 1859, New Pal. Foss., Coal Meas. [Sig. sharp-spined.]
- ovalis, Lyon & Casseday, 1859, Am. Jour. Sci., vol. 28, Kaskaskia Gr. [Sig. egg-shaped.]
- paternus, Hall, 1863, Crin. Wav. Sands. Ohio, Waverly Gr. [Sig. paternal.]
- perangulatus, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. very angular.]
- planobrachiatus, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. smooth-armed.]
- ramosus, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. branching.]
- sacculus, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. a little bag.]
- sacculus var concinnus, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. beautiful.]
- scobina, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. a rasp.]
- scoparius, Hall, 1861, Desc. New Crinoida, Burlington Gr. [Sig. a sweeper.]
- serratus, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. serrated.]
- spinosus, Owen & Shumard, 1852, (Poteriocrinus spinosus) Jour. Acad. Nat. Sci. Phil., Kaskaskia Gr. [Sig. spiny.]

stimpsoni, Lyon, 1869, Trans. Am. Phil. Soc., vol. 13, Low. Carb. [Ety. proper name.]  
 subtumidus, Worthen, 1873, Geo. Sur. Ill., vol. 5, Chester Gr. [Sig. somewhat tumid or swollen.]

troostianus, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Ety. proper name.]  
 wortheni, Hall, 1858, Geo. Rep. Iowa, Kaskaskia, Gr. [Ety. proper name.]

### ADDENDA.

- BELEMNOCRINUS florifer, Wachsmuth & Springer, 1877, Am. Jour. Sci. & Arts, 3rd series, vol. 13, Burlington Gr. [Sig. flower-bearing—the appearance is that of a bouquet of flowers in a conical vase.]  
 pourtalesi, Wachsmuth & Springer, 1877, Am. Jour. Sci. & Arts, 3d series, vol. 13, Burlington Gr. [Ety. proper name.] These authors have pointed out the family relationship of the genus Belemnocrinus with Apiocrinus and the genus should therefore be classed with the Apiocrinidæ.  
 EUCLADOCRINUS, Meek, 1871, proposed as a subgenus of Platycrinus and founded upon P. montanaensis.

# SUB-KINGDOM MOLLUSCA.

---

FIRST CLASS,	-	-	-	-	BRYOZOA.
SECOND CLASS,	-	-	-	-	BRACHIOPODA.
THIRD CLASS,	-	-	-	-	PTEROPODA.
FOURTH CLASS,	-	-	-	-	GASTEROPODA.
FIFTH CLASS,	-	-	-	-	CEPHALOPODA.
SIXTH CLASS,	-	-	-	-	LAMELLIBRANCHIATA.

---

## CLASS BRYOZOA.

FAMILY CELLEPORIDÆ.—Flustra, Paleschara, Sagenella.

FAMILY ESCHARIDÆ.—Arthroclema, Clathropora, Coscinium, Eschara, Escharopora, Glauconome, Helopora, Intricaria, Phænopora, Ptilodictya, Semicoscinium, Stictopora.

FAMILY CRISIDÆ.—Alecto, Hippothoa.

FAMILY RETEPORIDÆ.—Archimedes, Botryllopora, Carinopora, Cryptopora, Evactinopora, Fenestella, Fenestralia, Gorgonia, (?) Hemitrypa, Ichthyorachis, Lyropora, Phyllopora, Polypora, Ptilopora, Retepora, Septopora, Synocladia, Teniopora.

FAMILY THAMNISCIDÆ.—Thamniscus.

FAMILY TUBULIPORIDÆ.—Callopora, Ceramopora, Ceriopora, Cyclopora, Hornera, Lichenalia, Rhinopora, Trematopora.

---

ALECTO, Lamouroux, 1821, Exposit. Method.  
[Ety. mythological name.]

auloporoides, Nicholson, 1875, Ohio Pal.,  
vol. 2, Cin'ti Gr. [Sig. like *Aulopora*.]

canadensis, Nicholson, 1875, Can. Nat.  
& Geol., Corniferous Gr. [Ety. proper  
name.]

confusa, Nicholson, 1875, Ohio Pal., vol.  
2, Cin'ti Gr. [Sig. confused.]

frondosa, James, 1875, Ohio Pal., vol. 2,  
Cin'ti Gr. [Sig. branchy.]

inflata, Hall, 1847, Pal. N. Y., vol. 1,  
Trenton & Hud. Riv. Gr. [Sig. in-  
flated.]

nexilis, James, 1875, Int. to Catal. Cin.  
Foss., Cin'ti Gr. [Sig. wreathed to-  
gether.]

ARCHIMEDES, LeSueur, 1842, (Retepora archi-  
medes) Am. Jour. Sci., vol. 43. [Ety.  
from its resemblance to the machine  
for raising water, consisting of a tube  
rolled in a spiral form round a cylin-  
der, invented by Archimedes, a Greek  
mathematician.]

laxa, Hall, 1857, Proc. Am. Ass'n Ad.  
Sci., vol. 10, Kaskaskia Gr. [Sig.  
loose.]

meekiana, Hall, 1857, Proc. Am. Ass'n  
Ad. Sci., vol. 10, Kaskaskia Gr. [Ety.  
proper name.]

oweniana, Hall, 1857, Proc. Am. Ass'n  
Ad. Sci., vol. 10, Keokuk Gr. [Ety.  
proper name.]

reversa, Hall, 1858, Geo. Rep. Iowa, War-  
saw Gr. [Ety. from the reversed direc-  
tion of the spiral frond.]

swalloviana, Hall, 1857, Proc. Am. Ass'n  
Ad. Sci., vol. 10, Kaskaskia Gr. [Ety.  
proper name.]

wortheni, Hall, 1857, Proc. Am. Ass'n  
Ad. Sci., vol. 10, Warsaw Gr. [Ety.  
proper name.]

*Archimediopora*, D'Orb., 1849, Prod. de Pal.  
Syn. for Archimedes.

*archimedes*, see Archimedes.

ARTHROCLEMA, Billings, 1862, Pal. Foss., vol.  
1. [Ety. *arthron*, a joint; *klema*, a  
twig.]

- pulchella, Billings, 1862. Pal. Foss. vol. 1, Trenton Gr. [Sig. beautiful.]
- BOTRYLLOPORA**, Nicholson, 1874, Geo. Mag. Lond., n. s., vol. 1. [Ety. *botryllos*, a cluster; *poros*, a pore.]
- socialis, Nicholson, 1874, Geo. Mag. Lond., n. s., vol. 1, Ham. Gr. [Sig. living in groups or flocks.]
- CALLOPORA**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *kallos*, beautiful; *poros*, a pore.]
- aspera, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. rough.]
- elegantula, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. elegant.]
- florida, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. adorned.]
- heteropora, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Ety. *heteros*, irregular; *poros*, a pore.]
- hyale, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Ety. mythological name.]
- incrassata, Nicholson, 1874, Geo. Mag. Lond., n. s., vol. 1, Corniferous and Ham. Gr. [Sig. stout, thickened.]
- laminata, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. composed of thin plates.]
- macropora, Hall, 1874, 26th Reg. Rep., Devonian. [Sig. having long pores.]
- missouriensis, Rominger, 1866, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Ety. proper name.]
- nummiformis, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. in the form of small coins.]
- perelegans, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. very elegant.]
- ponderosa, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. heavy, bulky.]
- punctata, Hall, 1858, Geo. Rep. Iowa, Warsaw Gr. [Sig. punctated.]
- punctillata, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. a little dot.]
- singularis, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. singular.]
- unispina, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. one-spined.]
- venusta, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. elegant.]
- CARINOPORA**, Nicholson, 1874, Ann. Mag. Nat. Hist., 4th series, vol. 13. [Ety. *carina*, a keel; *poros*, a pore.]
- hindi, Nicholson, 1874, Ann. Mag. Nat. Hist., 4th series, vol. 13, Corniferous Gr. [Ety. proper name.]
- CERAMOPORA**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *keramis*, imbricated like roof tile, *poros*, a pore.]
- agellus, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. a small field.]
- confluens, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. colonies blended together.]
- foliacea, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. leaf-like.]
- huronensis, Nicholson, 1875, Geo. Mag., n. s., vol. 2, Ham. Gr. [Ety. proper name.]
- imbricata, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. imbricated, like shingles on a roof.]
- incrustans, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. incrusting other substances.]
- labecula, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. a little spot.]
- maculata, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. forming maculae or small clusters.]
- maxima, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. largest.]
- nicholsoni, James, 1875, Int. to Catal. Cin. Foss., Cin'ti Gr. [Ety. proper name.]
- ohioensis, Nicholson, 1875, Ohio Pal., vol. 2, Cin'ti Gr. [Ety. proper name.]
- CERIOPORA**, Goldfuss, 1826, Germ. Petref. [Ety. *kerion*, a honey-comb; *poros*, a pore.]
- hamiltonensis, Nicholson, 1874, Geo. Mag. Lond. n. s., vol. 1, Ham Gr. [Ety. proper name.]
- CLATHROPORA**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *clathrum*, a lattice; *pore*, a pore.] This genus is regarded by some as a synonym for *Coscinium*.
- albicornis, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. elk-horned.]
- clintonensis, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Clinton Gr. [Ety. proper name.]
- flabellata, Hall, 1851, Foster & Whitney's Rep., vol. 2, Trenton Gr. [Sig. spread out like a fan.]
- frondosa, Hall, 1852, Pal. N. Y., vol. 2, [Sig. branchy.]
- intertexta, Nicholson, 1874, Geo. Mag. Lond., n. s., vol. 1, Corniferous Gr. [Sig. inter-woven.]
- COSCIINIUM**, Keyserling, 1846. [Ety. *koskinon*, a sieve.]
- asterium, Prout, 1860, Trans. St. Louis Acad. Sci., Keokuk Gr. [Sig. like a star.]
- cribriforme, Prout, 1858, Trans. St. Louis Acad. Sci., Up. Held. Gr. [Ety. full of openings like a sieve.]
- cyclops, Keyserling, 1846, Up. Held. Gr. [Ety. mythological name.]
- elegans, Prout, 1860, Trans. St. Louis Acad. Sci., Lower beds of St. Louis Gr. [Sig. elegant.]
- escharoides, Prout, 1860, Trans. St. Louis Acad. Sci., erroneously written *escharense*, Keokuk Gr. [Sig. like the genus *eschara*.]
- keyserlingi, Prout, 1858, Trans. St. Louis Acad. Sci., Warsaw Gr. [Ety. proper name.]
- micHELINIA, Prout, 1860, Trans. St. Louis Acad. Sci., St. Louis Gr. [Ety. proper name.]

- plumosum, Prout, 1860, Trans. St. Louis Acad. Sci., St. Louis Gr. [Sig. feathery.]
- sagenella, Prout, 1860, Trans. St. Louis Acad. Sci., St. Louis Gr. [Sig. from its resemblance to the genus *Sagenella*.]
- tuberculatum, Prout, 1860, Trans. St. Louis Acad. Sci., Keokuk Gr. [Sig. covered with tubercles.]
- wortheni, Prout, 1860, Trans. St. Louis Acad. Sci., Keokuk Gr. [Ety. proper name.]
- CRYPTOPORA**, Nicholson, 1874, Ann. Mag. Nat. Hist., 4th ser., vol. 13. [Ety. *kryptos*, concealed; *poros*, a pore.]
- mirabilis, Nicholson, 1874, Ann. Mag. Nat. Hist., 4th ser., vol. 13, Corniferous Gr. [Sig. wonderful.]
- CYCLOPORA**, Prout, 1860, Trans. St. Louis Acad. Sci. [Ety. *kuklos*, circle; *poros*, a pore.]
- discoidea, Prout, 1860, Trans. St. Louis Acad. Sci., Keokuk Gr. [Sig. disc-like, quoit-shaped.]
- fungia, Prout, 1860, Trans. St. Louis Acad. Sci., Keokuk Gr. [Ety. from its resemblance to the genus *Fungia*.]
- jamesi, Prout, 1860, Trans. St. Louis Acad. Sci., Cin'ti Gr. [Ety. proper name.]
- polymorpha, Prout, 1860, Trans. St. Louis Acad. Sci., Chester Gr. [Sig. many-formed.]
- Diamesopora*, Hall, 1852. Not defined.
- dichotoma*, see *Trematopora dichotoma*.
- ESCHARA**, Lamarck, 1801, Syst. An. sans. Vert. [Ety. *eschar*, a scar.]
- (?) *concentrica*, Prout, Trans. St. Louis Acad. Sci., Carb. [Sig. in concentric lines.]
- ovatipora, Troost, 1840, 5th Geo. Rep. Tenn., Low. Sil. [Ety. *ovatus*, ovate; *pora*, a pore.]
- reticulata, Troost, 1840, 5th Geo. Rep. Tenn., Low. Sil. [Sig. reticulated.]
- tuberculata, Prout, 1858, Trans. St. Louis Acad. Sci., Carb. [Sig. tuberculated.]
- ESCHAROPORA**, Hall, 1847, Pal. N. Y. vol. 1. [Ety. *eschar*, a scar; *poros*, a pore or cell.]
- lirata, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. lined.]
- nebulosa, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. misty, foggy.]
- recta, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. straight.]
- recta var. nodosa, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. nodose, knotty.]
- tenuis, Hall, 1874, 26th Reg. Rep., N. Y., Low. Held. Gr. [Sig. slender.]
- EVACTINOPORA**, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil. [Ety. *evactinos*, with beautiful rays; *poros*, a pore.]
- grandis, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Burlington Gr. [Sig. grand, large.]
- radiata, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. rayed.]
- sexradiata, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Burlington Gr. [Sig. six-rayed.]
- FENESTELLA**, Lonsdale, 1839, Murch. Sil. Syst. [Ety. *fenestella*, a little window.]
- acmea, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. pointed.]
- acuticosta, Roemer, 1860, Sil. Fauna West Tenn., Niagara Gr. [Sig. sharp-ribbed.]
- aspera, Hall, 1847, (Gorgonia aspera) Pal. N. Y., vol. 1, Chazy Gr. [Sig. rough.]
- banyana, Prout, 1859, Trans. St. Louis Acad. Sci., Low. Carb. [Ety. from its resemblance to the rootlets of the banyan-tree of India.]
- bifurcata, Prout, 1866, Trans. St. Louis Acad. Sci., Ham. Gr. [Sig. bifurcated, forked.]
- corticata, Prout, 1858, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. having rind or bark.]
- crebripora, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. having the openings very close.]
- cribrosa, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. like a sieve.]
- dawsoni, Nicholson, 1875, Geo. Mag. vol. 2, n. s. Ham. Gr. [Ety. proper name.]
- delicata, Meek, 1871, Proc. Acad. Nat. Sci. Phil., vol. 23, Waverly Gr. [Sig. delicate, thin.]
- dilata, Prout, 1866, Trans. St. Louis Acad. Sci., Ham. Gr. [Sig. spread out.]
- elegans, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. elegant.]
- eximia, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. excellent, select.]
- filiformis, Nicholson, 1874, Geo. Mag., vol. 1, n. s., Corniferous Gr. [Sig. thread-like.]
- filitexta, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. woven like threads.]
- flabellata, Phillips, 1836, Geo. York. pt. 2, Coal Meas. or Permian. [Sig. fan-like.]
- gracilis, Hall, 1847, (Retepora gracilis) Pal. N. Y., vol. 1, Chazy Gr. [Sig. slender.]
- hemitrypa, Prout, 1859, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. from half-closed fenestrules.]
- idalia, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Ety. mythological name.]
- incepta, Hall, 1847, (Retepora incepta) Pal. N. Y., vol. 1, Chazy Gr. [Sig. incipient.]
- intermedia, Prout, 1858, Trans. St. Louis Acad. Sci., Carb. [Sig. intermediate.]
- lyelli, Dawson, 1868, Acad. Geol., Low, Carb. [Ety. proper name.]

- magnifica*, Nicholson, 1874, Geo. Mag., vol. 1, n. s., Corniferous Gr. [Sig. magnificent.]
- marginalis*, Nicholson, 1874, Geo. Mag., vol. 1, n. s., Corniferous Gr. [Sig. pertaining to the margin.]
- multiporata*, var. *lodiensis*, Meek, 1875, Ohio Pal., vol. 2, Waverly Gr. [Ety. proper name.]
- nervata*, Nicholson, 1875, Ohio Pal., vol. 2, Niag. Gr. [Sig. full of nerves or fibers.]
- nervia*, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Ety. proper name.]
- nodosa*, Prout, 1866, Trans. St. Louis Acad. Sci., Ham. Gr. [Sig. nodose, knotty.]
- norwoodiana*, Prout, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]
- parvulipora*, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. having very small pores.]
- plebeia*, Geinitz, 1866, Carb. und Dyas. Neb., Upper Coal Meas. This name was preoccupied by McCoy, and the species is distinct.
- plumosa*, Prout, 1858, Trans. St. Louis Acad. Sci., Warsaw Gr. [Sig. feathery.]
- popeana*, Prout, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- præcursor*, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. forerunner.]
- prisca*, Lonsdale, 1839, Murch. Sil. Syst., Clinton Gr. [Sig. ancient.]
- puncto-striata*, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. dotted and striated.]
- shumardi*, Prout, 1858, Trans. St. Louis Acad. Sci., vol. 1, Up. Coal Meas. [Ety. proper name.]
- subretiformis*, Prout, 1858, Trans. St. Louis Acad. Sci., Carb. [Sig. somewhat net-shaped.]
- sylvia*, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Ety. mythological name.]
- tenuiceps*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. slender-headed.]
- tenuis*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. thin, slender.]
- trituberculata*, Prout, 1858, Trans. St. Louis Acad. Sci., Carb. [Sig. having three tubercles.]
- variabilis*, Prout, 1858, Trans. St. Louis Acad. Sci., Carb. [Sig. variable, changing.]
- FENESTRALIA**, Prout, 1858, Trans. St. Louis Acad. Sci. [Ety. from the genus *Fenestella*.]
- st. *iudovici*, Prout, 1858, Trans. St. Louis Acad. Sci., St. Louis Gr. [Ety. proper name.] *Sanctus Ludovicus*, Latin for St. Louis.
- FLUSTRA**, Linnaeus, 1745, Amaenitates acad-  
emice. [Sig. calm.]
- carbaceoides*, Eaton, 1832, Geo. Text Book, Devonian. [Ety. from a supposed resemblance to the recent *Flustra carbacea*.]
- spatulata*, Prout, 1859, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. spatula-shaped.]
- tuberculata*, Prout, 1859, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. tuberculated.]
- GLAUCONOME**, Goldfuss, 1826, Germ. Petref. [Ety. mythological name.]
- nerëidis*, White, 1874, Rep. Invert. Foss., Carb. [Ety. *nerium*, a tree; *eidos*, like.]
- trilineata*, Meek, 1872, Pal. E. Neb., Coal Meas. [Sig. three lined or striated.]
- GORGONIA**, Linnaeus, 1745, Amaenitates acad-  
emice. [Ety. mythological name.]
- (?) *aspera*, see *Fenestella aspera*.
- dubia*, Goldfuss, 1826, Petref. Germ. Per-  
mian. [Sig. doubtful.]
- perantiqua*, see *Retepora perantiqua*.
- HELOPORA**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *helos*, a club; *poros*, a perforation.]
- armata*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. furnished with defenses.]
- bellula*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. pretty, neat.]
- circe*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Ety. mythological name.]
- concava*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. concave.]
- formosa*, Billings, 1865, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. beautiful.]
- fragilis*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. frail, easily broken.]
- fragilis* var. *acadiensis*, Hall, 1860, Can. Nat. & Geo., vol. 5, Anticosti Gr. [Ety. proper name.]
- irregularis*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. irregular.]
- lineata*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. lined, striated.]
- lineopora*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. lined with perforations.]
- nodosa*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. full of knots.]
- striatopora*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. striated coral.]
- strigosa*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. thin, meagre.]
- varipora*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. cells varying in size.]
- HEMITRYPA**, Phillips, 1841, Pal. Foss. of Cornwall, Devon. and West Somerset. [Ety. *hemitrypa*, half-foramen.]
- dubia*, Hall, 1876, 28th Reg. Rep., Niag-  
ara Gr. [Sig. doubtful.]
- prima*, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. first.]

- HETERODICTYA**, Nicholson, 1875, Geo. Mag., vol. 2, n. s. [Ety. *heteros*, irregular; *dictyon*, a net.] The correct orthography is *Heterodictyon*.
- gigantea*, Nicholson, 1875, Geo. Mag., vol. 2, Low. Carb. [Sig. large, gigantic.]
- Hippothoa*, Lamouroux, 1821, Expos. method. *inflata*, see *Alecto inflata*.
- HORNERA**, Lamouroux, 1821, Expos. method. des genres de l'Ordre des Pol. [Ety. proper name.]
- dichotoma*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. divided into two; forked.]
- ICHTHYORACHIS**, McCoy, 1844, Carb. Foss. Ireland. [Ety. *ichthys*, a fish; *rachis*, a backbone.]
- nerais*, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Ety. mythological name.]
- INTRICARIA**, Defrance, 1823, Dictionnaire des Sciences Naturelles. [Ety. *intrico*, to entangle.]
- reticulata*, Hall, 1847, Pal. N. Y., vol. 1, Trenton & Cin'ti Gr. [Sig. networked.]
- LICHENALIA**, Hall, 1852, Pal. N. Y., vol. 2. [Sig. from resemblance to a marine lichen.]
- concentrica*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. concentrically wrinkled.]
- concentrica var. parvula*, Hall, 1876, 28th Reg. Rep. N. Y., Niag. Gr. [Sig. small.]
- LYROPORA**, Hall, 1857, Proc. Am. Assoc. Ad. Sci., vol. 10. [Ety. *lyra*, a lute; *pora*, a pore.]
- lyra*, Hall, 1857, Proc. Am. Ass. Ad. Sci., vol. 10, Kaskaskia Gr. [Sig. a lute.]
- quincuncialis*, Hall, 1857, Proc. Am. Ass. Ad. Sci., vol. 10, Kaskaskia Gr. [Sig. in the form of a quincunx; an oblique arrangement.]
- retrorsa*, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Burlington Gr. [Sig. turned back.]
- subquadrans*, Hall, 1857, Proc. Am. Ass. Ad. Sci., vol. 10, Kaskaskia Gr. [Sig. somewhat square.]
- PALESCHARA**, Hall, 1874, 26th Reg. Rep. [Sig. ancient *Eschara*.]
- aspera*, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. rough.]
- bifoliata*, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. two-leaved.]
- incrustans*, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. incrusting other objects.]
- maculata*, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. spotted.]
- offula*, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. a small piece.]
- spherion*, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. a little ball.]
- PHENOPORA**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *phaino*, to open or make a window; *poros*, a pore.]
- constellata*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. starred.]
- ensiformis*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Ety. like a sword.]
- expansa*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Clinton Gr. [Sig. spread out.]
- explanata*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. spread out.]
- multi-pora*, Hall, 1851, Geo. Lake Sup. Land. Dist., vol. 2, Trenton Gr. [Sig. having many pores.]
- PHYLLOPORA**, King, 1849, Ann. Nat. Hist., 2d ser., vol. 3. [Ety. *phyllon*, a leaf; *poros*, a pore.]
- ehrenbergi*, Geinitz, 1846, (Gorgonia ehrenbergi) Grundriss, Permian Gr. [Ety. proper name.]
- POLY-PORA**, McCoy, 1845, Carb. Foss. Ireland. [Ety. *polys*, many; *poros*, a pore.]
- biarmica*, (?) Keyserling, 1846, Russia and the Ural Mts., Geinitz referred a form from the Coal Meas. to this species, and Prout referred a form from the Chester Gr. to it. [Sig. strong-jointed.]
- elegans*, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. elegant.]
- gracilis*, Prout, 1860, Trans. St. Louis Acad. Sci., Keokuk Gr. [Sig. slender.]
- halliana*, Prout, 1860, Trans. St. Louis Acad. Sci., St. Louis Gr. [Ety. proper name.]
- hamiltonensis*, Prout, 1866, Geo. Sur. Ill., vol. 2, Ham. Gr. [Ety. proper name.]
- imbricata*, Prout, 1866, Trans. St. Louis Acad. Sci., Devonian. [Sig. imbricated.]
- incepta*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. incipient.]
- intermedia*, Prout, 1858, Trans. St. Louis Acad. Sci., Up. Held. Gr. [Sig. intermediate.]
- lilia*, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Ety. proper name.]
- mexicana*, Prout, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- (?) *psyche*, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Ety. mythological name.]
- pulchella*, Nicholson, 1874, Geo. Mag. Lond., n. s., vol. 1, Corniferous Gr. [Sig. beautiful.]
- rigida*, Prout, 1866, Trans. St. Louis Acad. Sci., Ham. Gr. [Sig. rigid.]
- shumardi*, Prout, 1858, Trans. St. Louis Acad. Sci., Up. Held. Gr. [Ety. proper name.]
- stragula*, White, 1874, Rep. Invert. Foss., Carb. [Sig. outward covering or garment.]
- submarginata*, Meek, 1872, Pal. E. Neb., Coal Meas. [Sig. somewhat like *P. marginata*.] This species was referred by Geinitz to *P. marginata* of McCoy.
- tenella*, Nicholson, 1874, Geo. Mag. Lond. n. s., vol. 1, Corniferous Gr. [Sig. delicate.]



- tuberculata, Prout, 1859, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. tuberculated.]
- tuberculata, Nicholson, 1874, Geo. Mag. Lond., vol. 1, Corniferous Gr. This name was preoccupied by Prout in 1859.
- varsoviensis, Prout, 1858, Trans. St. Louis Acad. Sci., Warsaw Gr. [Ety. proper name.]
- PTILODICTYA**, Lonsdale, 1839, Murch. Sil. Syst. [Ety. *ptilon*, a wing; *dictyon*, a net.] The correct orthography is Ptilodictyon.
- acuminata, James, 1876, Int. Catal. Cin. Foss., Cin'ti Gr. [Sig. sharp-pointed.]
- alcyone, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Ety. mythological name.]
- arctipora, Nicholson, 1875, Ohio Pal., vol. 2, Cin'ti Gr. [Sig. having narrow pores.]
- arguta, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. very distinct.]
- canadensis, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Ety. proper name.]
- carbonaria, see Stictopora carbonaria.
- cocciniformis, Nicholson, 1875, Geo. Mag., n. s., vol. 2, Ham. Gr. [Sig. resembling Coccinium.]
- dictyota, Meek, 1872, Hayden's Geo. Rep., Low. Carb. [Sig. net-worked.]
- emacerata, Nicholson, 1875, Ohio Pal., vol. 2, Cin'ti Gr. [Sig. thin, lean.]
- excellens, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. excellent.]
- explicans, Safford, 1869, Geo. of Tenn. Not defined.
- falciformis, Nicholson, 1875, Ohio Pal., vol. 2, Cin'ti Gr. [Sig. sword-shaped.]
- fenestelliformis, Nicholson, 1875, Ohio Pal., vol. 2, Cin'ti Gr. [Ety. from resemblance to *Fenestella*.]
- flagellum, Nicholson, 1875, Ohio Pal., vol. 2, Cin'ti Gr. [Sig. a small whip.]
- fragilis, Billings, 1866, Catal. Sil. Foss. Antic. Hud. Riv. Gr. [Sig. frail.]
- gladiola, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. sword-grass.]
- libana, Safford, 1869, Geo. of Tenn., Trenton Gr. [Ety. proper name.]
- meeki, Nicholson, 1874, Geo. Mag., n. s., vol. 1, Corniferous & Ham. Gr. [Ety. proper name.]
- multiramis, Safford. Not defined.
- nitidula, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. neat.]
- pavonia, see Monticulipora pavonia.
- rustica, Billings, 1865, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. rough.]
- sercata, see Stictopora sercata.
- sulcata, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. furrowed.]
- superba, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. superb.]
- symmetra, Safford. Not defined.
- tarda, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Sig. thick.]
- tenera, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. tender.]
- PTILOPORA**, McCoy, 1844, Syn. Carb. Foss., Ireland. [Ety. *ptilon*, a plume; *poros*, a pore.]
- prouti, Hall, 1858, Geo. Rep. Iowa, Warsaw Gr. [Ety. proper name.]
- RETEPORA**, Lamarck, 1801, Syst. An. sans. Vert. [Ety. *rete*, a net; *poros*, a pore.]
- angulata, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. angular.]
- antiqua, as identified by d'Archiac & Verneuil. Not American.
- archimedes, Lesueur, see Archimedes.
- asperato-striata, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. rough and striated.]
- clintoni, Vanuxem, 1842, Geo. Rep. 3d Dist. N. Y., Clinton Gr. [Ety. proper name.]
- diffusa, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. diffused, extended.]
- fenestrata, Hall, 1850, 3d Reg. Rep., Clinton Gr. [Sig. having open windows.]
- foliacea, Hall, 1847. This name Prof. Hall says may be erased from the list of fossils.
- gracilis, see Fenestella gracilis.
- hamiltonensis, Prout, 1866, Trans. St. Louis Acad. Sci., Ham. Gr. [Ety. proper name.]
- incepta, see Fenestella incepta.
- perantiqua, Hall, 1847, (Gorgonia (?) perantiqua) Pal. N. Y., vol. 1, Trenton Gr. [Sig. very ancient.]
- phillipsi, Nicholson, 1874, Geo. Mag., n. s., vol. 1, Corniferous Gr. [Ety. proper name.]
- trentonensis, Nicholson, 1875, Geo. Mag., vol. 2, n. s., Trenton Gr. [Ety. proper name.]
- RHINOPORA**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *rhine*, a file; *poros*, a pore.] Better orthography would be *Rhinipora*.
- frondosa, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Clinton Gr. [Sig. branchy.]
- tuberculosa, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. abounding in tubercles.]
- tubulosa, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. abounding in tubes.]
- verrucosa, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. covered with wart-like projections.]
- SAGENELLA**, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Ety. *sagenella*, a little drag net.]
- elegans, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. elegant.]
- membranacea, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. membrane-like.]

- SEMICOSCINIUM**, Prout, 1859, Trans. St. Louis Acad. Sci. [Sig. somewhat like fossils of the genus *Coscinium*.]
- seriense**, Prout, 1860, Trans. St. Louis Acad. Sci., Devonian. [Ety. proper name.]
- rhomboideum**, Prout, 1859, Trans. St. Louis Acad. Sci., Up. Held. Gr. [Sig. rhomboidal.]
- tuberculatum**, Prout, 1860, Trans. St. Louis Acad. Sci., Up. Held. Gr. [Sig. tuberculated.]
- SEPTOPORA**, Prout, 1859, Trans. St. Louis Acad. Sci. [Ety. *septum*, partition or division; *pore*, a pore.]
- cestriensis**, Prout, 1850, Trans. St. Louis Acad. Sci., Chester Gr. [Ety. proper name.]
- STICTOPORA**, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *stictos*, spotted or punctured; *poros*, a pore.]
- acuta**, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. sharp.]
- carbonaria**, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. from the Coal Measures.]
- crassa**, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. thick.]
- elegantula**, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. quite elegant.]
- fenestrata**, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. [Sig. open, having windows.]
- gilberti**, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Corniferous Gr. [Ety. proper name.]
- glomerata**, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. [Sig. confused, out of order.]
- labyrinthica**, Hall, 1847, Pal. N. Y., vol. 1, Birdseye Gr. [Sig. intricate.]
- lichenoides**, Meek, 1873, Pal. Ohio, vol. 1, Corniferous Gr. [Sig. resembling a *Lichen*.]
- magna**, Hall & Whitfield, 1875, Pal. Ohio, vol. 2, Clinton Gr. [Sig. great, large.]
- punctipora**, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. *punctus*, a puncture; *pore*, a pore.]
- ramosa**, Hall, 1847, Pal. N. Y., vol. 1, Birdseye Gr. [Sig. branching.]
- rariopora**, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. cells distant.]
- serrata**, Meek, 1875, Pal. Ohio, vol. 2, Coal Meas. [Sig. serrated.]
- shafferi**, Meek, 1872, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Ety. proper name.]
- similis**, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. similar.]
- sulcata**, Winchell, 1866, Rep. Low. Penin. Mich., Ham. Gr. [Sig. furrowed.]
- variabilis**, Prout, 1866, Trans. St. Louis Acad. Sci., Up. Sil. [Sig. variable, not always the same.]
- SYNOCLADIA**, King, 1849, Trans. Geol. Soc. Lond., 2d Ser., vol. 3. [Ety. *syn*, together; *klados*, a young branch.]
- biserialis**, Swallow, 1858, Trans. St. Louis Acad. Sci., Up. Coal Meas. [Sig. in allusion to the two rows of cellules.]
- TÆNIOPORA**, Nicholson, 1874, Geo. Mag. Lond., n. s., vol. 1. [Ety. *tainia*, a ribbon; *poros*, a pore.]
- exigua**, Nicholson, 1874, Geo. Mag. Lond., n. s., vol. 1, Ham. Gr. [Sig. little, small.]
- penniformis**, Nicholson, 1874, Geo. Mag. Lond. n. s., vol. 1, Ham. Gr. [Sig. resembling a feather.]
- THAMNISCUS**, King, 1849, Perm. Foss. [Ety. *thamniskos*, a little shrub.]
- niagarensis**, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Ety. proper name.]
- TREMATOPORA**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *trema*, a hole; *poros*, a pore.]
- aspera**, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. rough.]
- coalescens**, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. uniting together.]
- constricta**, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. constricted.]
- corticosa**, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. like thick bark.]
- densa**, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. thick, close.]
- dichotoma**, Hall, 1852, (*Diamesopora dichotoma*) Pal. N. Y., vol. 2, Niagara Gr. [Sig. dividing into two.]
- echinata**, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. set with spines.]
- fragilis**, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. frail.]
- granulifera**, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. bearing granules.] The same species is marked "n. sp." in 28th Reg. Rep., probably by mistake.
- infrequens**, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. not frequent.]
- maculosa**, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. spotted.]
- minuta**, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. very small.]
- osculum**, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. pretty mouth.]
- ostiolata**, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. having small openings.]
- ponderosa**, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. heavy.]
- punctata**, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. dotted.]
- regularis**, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. in allusion to the regular arrangement of the cells.]
- rhombifera**, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. rhomb-bearing.]
- signatus**, Hall, 1874, 26th Reg. Rep., Low. Held. Gr. [Sig. marked.]
- solida**, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. solid.]
- sparsa**, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. scattered.]
- spinulosa**, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. full of little spines.]

*spinulosa*, Hall, 1876, 28th Reg. Rep., Niagara Gr. The name was preoccupied. Possibly the species are identical.

*striata*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. striated.]

*superba*, Billings, 1866, Catal. Sil. Foss. Antic., Clinton & Niagara Gr. [Sig. splendid.]

*tuberculosa*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. full of tubercles.]

*tubulosa*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. full of tubes.]

*varia*, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. different; from the variable cell mouths.]

*variolata*, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. from the distant and variable cell mouths.]

*vesiculosa*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. full of vesicles.]

# CLASS BRACHIOPODA.

FAMILY CALCEOLIDÆ.—Calceola.

FAMILY CRANIIDÆ.—Crania, Pholidops, Pseudocrania, Schizocrania.

FAMILY DISCINIDÆ.—Discina, Trematis.

FAMILY KONINCKIIDÆ.—Koninckia.

FAMILY LINGULIDÆ.—Kutorgina, Leptobolus, Lingula, Lingulella, Lingulepis, Lingulops, Obolus, Obolella.

FAMILY ORBICULIDÆ.—Acrotreta, Iphidea, Orbicula.

FAMILY ORTHIDÆ.—Ægilops, Meekella, Orthis, Orthisina, Skenidium, Tropidoleptus, Vitulina.

FAMILY PENTAMERIDÆ.—Amphigenia, Anastrophia, Camarella, Camarophoria, Gypidula, Pentamerella, Pentamerus, Stricklandinia.

FAMILY PORAMBONITIDÆ.—Porambonites.

FAMILY PRODUCTIDÆ.—Aulosteges, Chonetes, Productella, Productus, Strophalosia.

FAMILY RHYNCHONELLIDÆ.—Acambona, Eatonia, Leiorhynchus, Rhynchonella, Stenoschisma.

FAMILY SPIRIFERIDÆ.—Amboccelia, Athyris, Atrypa, Camarium, Cryptonella, Cyrtia, Cyrtina, Eichwaldia, Martinia, Merista, Meristella, Meristina, Nucleospira, Pentagonia, Retzia, Rhynchospira, Spirifera, Spiriferina, Syntrielasma, Syringothyris, Trematospira, Trigonotreta, Waldheimia, Zygospira.

FAMILY STROPHOMENIDÆ.—Leptæna, Streptorhynchus, Strophodonta, Strophomena.

FAMILY TEREBRATULIDÆ.—Centronella, Cœlospira, Leptoccelia, Rensselaeria, Terebratula.

FAMILY TRIMERELLIDÆ.—Dinobolus, Monomerella, Trimerella.

ACAMBONA, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9. [Ety. *aka*, a point; *umbona*, umbo.]

prima, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. first.]

ACROTRETA, Kutorga, 1848, Über die Siphonotretæ aus den Verhandlungen der Kaiserlichen Mineralogischen Gesellschaft für Jahr. [Ety. *akros*, the top or summit; *tretos*, perforated.]

attenuata, Meek, 1872, Hayden's Geo. Rep., Potsdam Gr. [Sig. drawn out.]

gemma, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. a young bud.]

pyxidicula, White, 1874, Rep. Invert. Foss., Quebec Gr. [Sig. a little box.]

subsidua, White, 1874, Rep. Invert. Foss., Potsdam Gr. [Sig. sinking down.]

ÆGILOPS, Hall, 1850, 3rd Reg. Rep. [Ety. *ægilops*, an acorn.]

subcarinata, Hall, 1850, 3rd Reg. Rep., Trenton Gr. [Sig. somewhat keeled.]

AMBOCCELIA, Hall, 1860, 13th Reg. Rep. [Ety. *ambon*, umbo; *koiolos*, the belly.]

*gemmula*, syn. for *Spirifera planoconvexa gregaria*, see *Amboccelia umbonata* var. *gregaria*.

minuta, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Chemung Gr. [Sig. very small.]

*nucleus*, syn. for *Amboccelia umbonata*.

præumbona, Hall, 1857, (Orthis præumbona) 10th Reg. Rep., Ham. Gr. [Sig. very protuberant.]

*subumbona*, see *Spirifera*, *subumbona*.

umbonata, Conrad, 1842, (Orthis umbonata) Jour. Acad. Nat. Sci., vol. 8, Marcellus shale & Ham. Gr. [Sig. protuberant, bossed.]

umbonata var. *gregaria*, Hall, 1860, (Amboccelia gregaria) 13th Reg. Rep., Chemung Gr. [Sig. in a common flock.]

- AMPHIGENIA**, Hall, 1867, Pal. N. Y., vol. 4. [Ety. *amphi*, on both sides; *gena*, growth.]  
*curta*, Meek & Worthen, 1868, (Strickland-*inia elongata* var. *curta*) Geo. Sur. Ill., vol. 3, Oriskany sandstone. [Sig. short.]  
*elongata*, Vanuxem, 1842, (Pentamerus *elongata*) Geo. 3rd Dist. N. Y., Schoharie grit & Up. Held. Gr. [Sig. elongated.]  
*elongata* var. *undulata*, Hall, 1867, Pal. N. Y., vol. 4, Up. Held. Gr. [Sig. waved.]  
*elongata* var. *subtrigonalis*, Hall, 1857, (Meganteris *subtrigonalis*) 10th Reg. Rep., Up. Held. Gr. [Sig. somewhat triangular.]
- ANASTROPHIA**, Hall, 1867, Pal. N. Y., vol. 4. [Ety. *ana*, with; *strophe*, a turning round; the relation of the valves is the reverse of that of *Pentamerus*.]  
*interplicata*, Hall, 1852, (Atrypa *interplicata*) Pal. N. Y., vol. 2, Niagara Gr. [Sig. from the interuplications.]  
*reversa*, Billings, 1857, (Pentamerus *reversus*) Rep. of Prog. Mid. Sil. [Sig. reversed; the dorsal valve being largest.]  
*verneuli*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- Anomia*, Linnaeus, 1767, Syst. Nat., 12th Ed. [Ety. *anomios*, unequal.]  
*biloba*, see *Orthis biloba*.  
*pecten*, see *Strophomena pecten*.  
*reticularis*, see *Atrypa reticularis*.
- Anomites*, Wahlenberg, 1821, Act., Upsal.  
*exporrectus*, see *Cyrtia exporrecta*.  
*glaber*, see *Spirifera glabra*.  
*punctatus*, see *Productus punctatus*.  
*resupinatus*, see *Orthis resupinatus*.  
*reticularis*, see *Atrypa reticularis*.  
*rhomboidalis*, see *Strophomena rhomboidalis*.  
*scabriculus*, see *Productus scabriculus*.  
*semireticulatus*, see *Productus semireticulatus*.
- ATHYRIS**, McCoy, 1844, Carb. Foss. Ireland. [Ety. *a*, without; *thuris*, a small door; in allusion to the absence of a deltidium or door. But the name is erroneous.]  
*americana*, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Ety. proper name.]  
*angelica*, Hall, 1861, 14th Reg. Rep., Chemung Gr. [Ety. proper name.]  
*argentea*, Shepard, 1838, Am. Jour. Sci., Up. Coal Meas. [Sig. pertaining to silver.]  
*biloba*, Winchell, 1865, (Spirigera *biloba*) Proc. Acad. Nat. Sci., Kinderhook Gr. [Sig. double-lobed.]  
*caput-serpentis*, Swallow, 1863, Trans. St. Louis Acad. Sci., Up. Coal Meas. [Ety. *caput*, head; *serpens*, a serpent.]  
*charitonensis*, Swallow, 1860, (Spirigera *charitonensis*) Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]  
*chloe*, Billings, 1860, Can. Jour., vol. 5, Devonian. [Ety. proper name.]  
*clara*, syn. for *Meristella nasuta*.  
*clintonensis*, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Ety. proper name.]  
*cora*, Hall, 1860, 13th Reg. Rep., Ham. & Chemung Gr. [Ety. mythological name.]  
*corpulenta*, Winchell, 1863, (Spirigera *corpulenta*) Proc. Acad. Nat. Sci., Chemung Gr. [Sig. corpulent.]  
*crassicardinalis*, White, 1860, Bost. Jour. Nat. Hist., vol. 8, Waverly Gr. [Sig. thick on the hinge.]  
*eborea*, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. made of ivory.]  
*euzona*, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. beautifully girdled.]  
*differentis*, McChesney, 1860, New Pal. Foss., Carb. [Sig. different.]  
*formosa*, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. beautiful.]  
*fultonensis*, Swallow, 1860, (Spirigera *fultonensis*) Trans. St. Louis Acad. Sci., Ham. Gr. [Ety. proper name.]  
*hannibalensis*, Swallow, 1860, (Spirigera *hannibalensis*) Trans. St. Louis Acad. Sci., Chemung Gr. [Ety. proper name.]  
*hawni*, Swallow, 1860, (Spirigera *hawni*) Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]  
*headi*, see *Zygospira headi*.  
*headi* var. *anticostiensis*, see *Zygospira headi* var. *anticostiensis*.  
*headi* var. *borealis*, see *Zygospira headi* var. *borealis*.  
*hirsuta*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. rough, prickly.]  
*incrassata*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. thickened.]  
*jacksoni*, Swallow, 1860, (Spirigera *jacksoni*) Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]  
*julia*, see *Meristella julia*.  
*junia*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Ety. proper name.]  
*lamellosa*, Leveille, 1835, (Spirifer *lamellosus*) Mem. Geol. Soc. France, Waverly Gr. [Sig. in very thin plates.]  
*lara*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Ety. mythological name.]  
*maconensis*, Swallow, 1860, (Spirigera *maconensis*) Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]  
*maia*, see *Spirifera maia*.  
*minima*, Swallow, 1860, (Spirigera *minima*) Trans. St. Louis Acad. Sci., Ham. Gr. [Sig. the least.]  
*missouriensis*, Swallow, 1860, (Spirigera *missouriensis*) Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]

- missouriensis*, Winchell, 1865, (*Spirigera missouriensis*) Proc. Acad. Nat. Sci., Lithographic limestone. This name was preoccupied.
- monticola*, White, 1874, (*Spirigera monticola*) Rep. Invert. Foss., Low. Carb. [Sig. inhabiting a mountain.]
- papilioniformis*, McChesney, 1865, Desc. New Pal. Foss., Chester Gr. [Sig. resembling a butterfly.]
- parvirostris*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. little-beaked.]
- pectinifera*, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. comb-bearing.]
- ohioensis*, Winchell, 1865, Proc. Acad. Nat. Sci., Chemung Gr. [Ety. proper name.]
- orbicularis*, McChesney, 1860, New Pal. Foss., Coal Meas. [Sig. orbicular.]
- planosulcata*, Phillips, 1836, Geol. York., vol. 2, Keokuk Gr. [Sig. plain-furrowed.]
- plattensis*, Swallow, 1863, Trans. St. Louis Acad. Sci., Up. Coal Meas. [Ety. proper name.]
- polita*, Hall, 1843, (*Atrypa polita*) Geo. 4th Dist. N. Y., Chemung Gr. [Sig. smoothed.]
- prinstana*, see *Meristella prinstana*.
- prouti*, Swallow, 1860, (*Spirigera Proutii*) Trans. St. Louis Acad. Sci., Chemung Gr. [Ety. proper name.]
- reflexa*, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. turned back.]
- singletoni*, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Coal Meas. [Ety. proper name.]
- solitaria*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. alone, solitary.]
- spiriferoides*, Eaton, 1831, (*Terebratula spiriferoides*) Am. Jour. Sci., vol. 21, Cornif. & Ham. Gr. [Sig. resembling a *Spirifera*.]
- sublamellosa*, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Sig. somewhat like *A. lamellosa*.]
- subquadrata*, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Sig. somewhat squared.]
- subtilita*, Hall, 1852, Stansbury's Exped. to Great Salt Lake, Coal Meas. [Sig. fine, thin.]
- tumida*, Dalman, 1827, (*Atrypa tumida*) Niagara Gr. [Sig. tumid, swollen out.] The fossil usually referred to this species is *Meristella maria*.
- tumidula*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. diminutive of *tumidus*; from its resemblance to *A. tumida* and smaller size.]
- umbonata*, see *Meristella umbonata*.
- vittata*, Hall, 1860, 13th Reg. Rep., Cornif. & Ham. Gr. [Sig. banded.]
- turgida*, Shaler, 1865, Bulletin No. 4, M. C. Z., Anticosti Gr. [Sig. swollen, inflated.]
- ATRYPA**, Dalman, 1827, Vet. Acad. [Ety. *a*, without; *trypa*, a hole or perforation. It was supposed the shells had no foramen under the beak. The name is erroneous.]
- acutiplicata*, see *Leptocoelia acutiplicata*.
- acutirostra*, see *Rhynchonella acutirostra*.
- aquiradiata*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Low. Held. Gr. [Sig. equal-rayed.]
- aquiradiata*, see *Rhynchonella aquiradiata*.
- affinis*, syn. for *Atrypa reticularis*.
- atilis*, see *Rhynchonella atilis*.
- ambigua*, see *Camarella ambigua*.
- aprinis*, see *Rhynchonella aprinis*.
- arata*, see *Pentamerella arata*.
- aspera*, Schlotheim, 1813, (*Terebratula aspera*) Petrefactenkunde, Ham. Gr. [Sig. rough.]
- aspera* var. *occidentalis*, Hall, 1858, Geo. Rep. Iowa, vol. 1, pt. 2, Ham. Gr. [Sig. western.]
- bidens*, see *Rhynchonella bidens*.
- bisulcata*, see *Camarella bisulcata*.
- borealis*, Schlotheim, as identified by d'Archiac & Verneuil. Not American.
- brevirostris*, as identified by Hall. See *Pentamerus brevisrostris* and *Anastrophia verneuili*.
- camura*, see *Trematospira camura*.
- capax*, see *Rhynchonella capax*.
- cassidea*, as identified by d'Archiac & Verneuil. Not American.
- chemungensis*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Chemung Gr. [Ety. proper name.]
- circulus*, see *Camarella circulus*.
- concinna*, see *Nucleospira concinna*.
- comis*, see *Pentamerus comis*.
- concentrica*, syn. for *Athyris spiriferoides*.
- congesta*, see *Camarella congesta*.
- congregata*, see *Stenoschisma congregata*.
- contracta*, see *Stenoschisma contracta*.
- corallifera*, see *Eichwaldia corallifera*.
- crassirostra*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Ety. *crassus*, thick; *rostra*, beak.]
- crenulata*, see *Terebratula crenulata*.
- cuboides*, as identified by Hall and others, see *Rhynchonella venustula*.
- cuneata*, see *Rhynchonella cuneata*.
- cuspidata*, see *Camarella cuspidata*.
- cylindrica*, see *Meristella cylindrica*.
- deflecta*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. bent or turned aside.]
- dentata*, see *Rhynchonella dentata*.
- disparilis*, see *Coelospira disparilis*.
- dubia*, see *Rhynchonella dubia*.
- dumosa*, Hall, 1843, Geo. Rep., 4th Dist. N. Y., Chemung Gr. [Sig. bushy.]
- duplicata*, see *Stenoschisma duplicata*.
- elongata*, syn. for *Rensselaeria ovoides*.
- emacerata*, see *Rhynchonella emacerata*.

- exigua*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. small.]
- eximia*, see *Stenoschisma eximia*.
- extans*, see *Camarella extans*.
- flabella*, syn. for *Leptocoelia hemispherica*.
- flabellites*, see *Leptocoelia flabellites*.
- galeata*, see *Pentamerus galeatus*.
- gibbosa*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. gibbous, tumid.]
- globuliformis*, see *Leiorhynchus globuliformis*.
- hemiplicata*, see *Camarella hemiplicata*.
- hemispherica*, see *Leptocoelia hemispherica*.
- hirsuta*, see *Trematospira hirsuta*.
- hystrix*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. covered with spines.]
- impressa*, Hall, 1857, 10th Reg. Rep., Schoharie grit. [Sig. impressed.]
- impressa*, Shaler. The name was preoccupied.
- increbescens*, syn. for *Rhynchonella capax*.
- inflata*, Conrad, 1843, Geo. Rep. 3rd Dist. N. Y., Catskill Gr. [Sig. inflated.]
- intermedia*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. intermediate.]
- interplicata*, see *Anastrophia interplicata*.
- laevis*, see *Merista laevis*.
- lamellata*, see *Rhynchonella lamellata*.
- laticosta*, Phillips, 1841, (*Terebratula laticosta*) Pal. Foss. Devonian. [Sig. wide-ribbed.] This species is not clearly identified in America.
- lentiformis*, syn. for *Atrypa reticularis*.
- limitaris*, see *Leiorhynchus limitaris*.
- marginalis* (?), Dalman, 1827, (*Terebratula marginalis*) Vet. Acad., Niagara Gr. [Sig. bordered.]
- medialis*, see *Eatonina medialis*.
- mesacostalis*, see *Leiorhynchus mesacostalis*.
- modesta*, see *Zygospira modesta*.
- nasuta*, see *Meristella nasuta*.
- naviformis*, Hall, 1843, Geo. 4th Dist. N. Y., Clinton Gr. [Sig. resembling a boat.]
- neglecta*, see *Rhynchonella neglecta*.
- nitida*, see *Meristina nitida*.
- nitida* var. *oblata*, see *Meristina nitida* var. *oblata*.
- nodostriata*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. rough and striated.]
- nucleolata*, Hall, 1852, Pal. N. Y., vol. 2, Coralline limestone. [Ety. *nucleus*, a kernel; *latus*, wide.]
- nucleus*, see *Camarella nucleus*.
- oblata*, Hall, 1852, Pal. N. Y., vol. 2, Medina Gr. [Sig. oblate.]
- obtusiplicata*, see *Rhynchonella obtusiplicata*.
- octocostata*, see *Pentamerella arata*.
- peculiaris*, see *Eatonina peculiaris*.
- planoconvexa*, see *Leptocoelia planoconvexa*.
- plebeia*, Conrad, 1843, Geo. Rep. 3rd Dist. N. Y., Ham. Gr. Preoccupied name.
- pleiopleura*, see *Rhynchonella pleiopleura*.
- plena*, see *Rhynchonella plena*.
- plicata*, see *Rhynchonella plicata*.
- plicatella* (?), see *Rhynchonella plicatella*.
- plicatula*, see *Rhynchonella plicatula*.
- plicifera*, see *Rhynchonella plicifera*.
- polita*, see *Athyris polita*.
- prisca*, syn. for *Atrypa reticularis*.
- pseudomarginalis*, Hall, 1860, 13th Reg. Rep., Up. Held. Gr. [Sig. false-margined.]
- quadrucostata*, Hall, 1843, see *Rhynchonella quadrucostata*.
- quadrucostata*, Hall, 1852, see *Rhynchonella quadrucostata*.
- rectiplicata*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Low. Held. Gr. [Sig. straight-plicated.]
- recurvirostra*, see *Rhynchonella recurvirostra*.
- reticularis*, Linnæus, 1767, (*Anomia reticularis*) Syst. Nat., ed. 12. It occurs with its varieties in all the Groups of the Upper Silurian and Devonian formations except the Oriskany sandstone. Some of its varieties or synonyms are *Atrypa affinis*, *A. lentiformis*, *A. prisca*, *A. tribulis*, *Hipparionyx consimularis*, etc. [Sig. reticulated.]
- robusta*, see *Rhynchonella robusta*.
- rostrata*, see *Meristella rostrata*.
- rugosa*, see *Rhynchonella rugosa*.
- scitula*, see *Meristella scitula*.
- semiplicata*, see *Rhynchonella semiplicata*.
- singularis*, see *Eatonina singularis*.
- sordida*, see *Rhynchonella sordida*.
- spinosa*, Hall, 1843, Geo. 4th Dist. N. Y., Cornif., Ham., Tully & Chemung Gr. Equal to *Atrypa aspera* var. *occidentalis*.
- subcuboides*, D'Orbigny, see *Rhynchonella subcuboides*.
- subtrigonalis*, see *Rhynchonella subtrigonalis*.
- sulcata*, see *Merista sulcata*.
- tenuilineata*, Hall, 1843, Geo. 4th Dist. N. Y., Chemung Gr. [Ety. *tenuis*, fine; *lineatus*, lined.]
- tribulis*, syn. for *Atrypa reticularis*.
- tumida*, see *Athyris tumida*.
- unguiformis*, syn. for *Orthis hipparionyx*.
- uniusulcata*, see *Meristella uniusulcata*.
- AULOSTEGES**, Helmerston, 1847, Bull. de la Classe Physi. Math. Acad. Sci. St. Petersburg. [Ety. *aulos*, a tube; *stega*, a chamber.]
- guadalupensis*, Shumard, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- spondyliiformis*, White & St. John, 1868, Trans. Chi. Acad. Sci., Up. Coal Meas. [Sig. vertebra-formed.]
- Brachymerus*, Shaler. The name was preoccupied for a genus of Coleoptera. See *Anastrophia*.



- Brachyprion geniculatum*, see *Strophomena geniculata*.  
*leda*, see *Strophomena leda*.  
*ventricosum*, see *Strophomena ventricosus*.
- CALCEOLA**, Lamarck, 1801, Syst. des Anim. sans. Vert. [Ety. *calceola*, a slipper.]  
*americana*, Safford, syn. for *C. tennesseensis*.  
*plicata*, Conrad, 1840, Ann. Rep. N. Y., Held. Gr. [Ety. from the plications toward the aperture.]  
*sandalina*, Lamarck, as identified by Troost, see *C. tennesseensis*.  
*tennesseensis*, Roemer, 1852, Lethæ. Geognost., Niagara Gr. [Ety. proper name.]
- CAMARELLA**, Billings, August, 1859, Can. Nat. & Geol., vol. 4. [Ety. *kamara*, arching chamber; *ella*, diminutive.]  
*ambigua*, Hall, 1847, (*Atrypa ambigua*) Pal. N. Y., vol. 1, Trenton Gr. [Sig. doubtful.]  
*antiquata*, Billings, 1861, Pal. Foss., vol. 1, Potsdam Gr. [Sig. very ancient.]  
*bisulcata*, Emmons, 1842, (*Orthis bisulcata*) Geo. Rep. N. Y., Trenton Gr. [Sig. double-furrowed.]  
*breviplicata*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. short-plicated.]  
*calcifera*, Billings, 1861, Can. Nat. & Geo., vol. 6, Calcif. Gr. [Ety. from the Calcareous Group.]  
*circulus*, Hall, 1847, (*Atrypa circulus*) Pal. N. Y., vol. 1, Trenton Gr. [Sig. circular.]  
*congesta*, Conrad, 1842, (*Atrypa congesta*) Jour. Acad. Nat. Sci., vol. 8, Clinton Gr. [Sig. a heap.]  
*costata*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. ribbed.]  
*cuspidata*, Hall, 1847, (*Atrypa cuspidata*) Pal. N. Y., vol. 1, Trenton Gr. [Sig. pointed.]  
*extans*, Emmons, 1842, (*Atrypa extans*) Geo. Rep. N. Y., Trenton Gr. [Sig. standing out.]  
*hemiplicata*, Hall, 1847, (*Atrypa hemiplicata*) Pal. N. Y., vol. 1, Trenton Gr. [Sig. half-plicated.]  
*lenticularis*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. lenticular.]  
*longirostra*, Billings, 1859, Can. Nat. and Geo., vol. 4, Chazy Gr. [Sig. long-beaked.]  
*nucleus*, Hall, 1847, (*Atrypa nucleus*) Pal. N. Y., vol. 1, Trenton Gr. [Sig. a kernel.]  
*ops*, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Ety. mythological name.]  
*ortoni*, Meek, 1872, (*Dicraniscus ortoni*) Am. Jour. Sci., 3rd ser., vol. 4, Clinton Gr. [Ety. proper name.]  
*panderi*, Billings, 1859, Can. Nat. and Geo., vol. 4, Black Riv. Gr. [Ety. proper name.]  
*parva*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. small.]
- polita*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. smoothed.]  
*reversa*, see *Anastrophia reversa*.  
*varians*, Billings, 1859, Can. Nat. and Geo., vol. 4, Chazy Gr. [Sig. variable.]  
*vorborthi*, Billings, 1859, Can. Nat. and Geo., vol. 4, Black Riv. Gr. [Ety. proper name.]
- CAMARIUM**, Hall, 1859, Pal. N. Y., vol. 3. [Ety. *kamara*, arching septum.]  
*elongatum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. elongated.]  
*typum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. type of the genus.]
- CAMEROPHORIA**, King, 1844, Ann. & Mag. Nat. Hist., vol. 14. [Ety. *kamara*, an arched chamber; *phoreo*, I carry.]  
*bisulcata*, Shumard, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. double furrowed.]  
*eucharis*, Hall, 1867, Pal. N. Y., vol. 4, Corniferous Gr. [Sig. graceful.]  
*globulina*, Phillips, 1844, as identified by Geinitz, is *Rhynchonella uta*.  
*schlotheimi*, Von Buch, 1834, (*Terebratulites schlotheimi*) Ueber Terebratel., Permian Gr. [Ety. proper name.] This is the type of the genus.  
*subtrigona*, Meek & Worthen, 1860, (*Rhynchonella subtrigona*) Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. somewhat three-cornered.]  
*swallowiana*, Shumard, 1859, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- CENTRONELLA**, Billings, 1859, Can. Nat. & Geo., vol. 4. [Ety. a little point.]  
*allii*, Winchell, 1865, Proc. Acad. Nat. Sci., Chemung Gr. [Ety. proper name.]  
*alveata*, Hall, 1857, (*Rhynchonella alveata*) 10th Reg. Rep., Onondaga Gr. [Sig. channeled.]  
*anna*, Hartt, 1868, Acad. Geol., Low. Carb. [Ety. proper name.]  
*billingsiana*, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Niagara Gr. [Ety. proper name.]  
*glansfagea*, Hall, 1857, (*Rhynchonella glansfagea*) 10th Reg. Rep., Schoharie grit, Cornif. Gr. and Oriskany sandstone. [Ety. *glans*, an acorn; *fagea*, beech tree.]  
*glauca*, Hall, 1867, Pal. N. Y., vol. 4, Ham. Gr. [Ety. proper name.]  
*hecate*, Billings, 1861, Can. Jour. vol. 6, Up. Held. Gr. [Ety. mythological name.]  
*impressa*, Hall, 1861, 14th Reg. Rep., Ham. Gr. [Sig. impressed.] Prof. Billings says this is a syn. for *C. hecate*.  
*julia*, Winchell, 1862, Proc. Acad. Nat. Sci., vol. 14, Marshall Gr. [Ety. proper name.]  
*ovata*, Hall, 1867, Pal. N. Y., vol. 4, Up. Held. Gr. [Sig. egg-shaped.]

- Charionella*, Billings, 1861, Can. Jour. Ind. Sci. and Art. Prof. Hall regards this name as a syn. for *Meristella*.  
*circe*, syn. for *Meristella scitula*.  
*doris*, see *Meristella doris*.  
 (?) *hyale*, see *Meristella hyale*.  
*CHONETES*, Fischer, 1837, Ōryekt. Moscou. [Ety. *chone*, a little cup.]  
*acutiradiata*, Hall, 1843, (*Strophomena acutiradiata*) Geo. Rep. 4th Dist. N. Y., Cornif. Gr. [Sig. sharp-radiated.]  
*antiope*, Billings, 1874, Pal. Foss., vol. 2, Low. Devonian. [Ety. mythological name.]  
*arcuata*, Hall, 1857, 10th Reg. Rep., Cornif. Gr. [Sig. bent.]  
*armata*, DeKoninck, the specimens referred to this species belong to *C. pusilla*.  
*canadensis*, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Ety. proper name.]  
*carinata*, Conrad, 1842, (*Strophomena carinata*) Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. carinated.]  
*complanata*, Hall, 1857, 10th Reg. Rep., Oriskany sandstone. [Sig. smoothed.]  
*cornuta*, Hall, 1843, (*Strophomena cornuta*) Geo. Rep. 4th Dist. N. Y., Clinton Gr. [Sig. horned.]  
*dawsoni*, Billings, 1874, Pal. Foss., vol. 2, Low. Devonian. [Ety. proper name.]  
*deflecta*, Hall, 1857, 10th Reg. Rep., Ham. Gr. [Sig. bent down.]  
*emmetensis*, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Ety. proper name.]  
*fischeri*, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., vol. 3, Kinderhook Gr. [Ety. proper name.]  
*flemingi*, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., vol. 3, Permian Gr. [Ety. proper name.]  
*geniculata*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Chemung Gr. [Sig. bent, geniculated.]  
*gibbosa*, syn. for *C. deflecta*.  
*glabra*, Hall, 1857, 10th Reg. Rep., Up. Held. Gr. [Sig. smooth.]  
*glabra*, Geinitz, 1866, Carb. und Dyas. The name was preoccupied.  
*granulifera*, Owen, 1852, Geo. Rep. Wis., Iowa and Minn., Coal Meas. [Sig. granule-bearing.]  
*hemispherica*, Hall, 1857, 10th Reg. Rep., Schoharie grit and Cornif. Gr. [Sig. hemispherical.]  
*illinoisensis*, Worthen, 1860, Trans. St. Louis Acad. Sci., Chester Gr. [Ety. proper name.]  
*iowensis*, Owen, 1852, Geo. Rep. Iowa, Wis. and Minn., Carb. [Ety. proper name.]  
*koninckiana*, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., vol. 3, Devonian. [Ety. proper name.]  
*laticosta*, syn. for *C. mucronata*.  
*lepada*, Hall, 1857, 10th Reg. Rep. Marcellus shale & Ham. Gr. [Sig. pretty.]  
*lineata*, Conrad, 1839, (*Strophomena lineata*) Ann. Geo. Rep. N. Y., Corniferous Gr. [Sig. lined.]  
*littoni*, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., vol. 3, Ham. Gr. [Ety. proper name.]  
*logani*, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., vol. 3, Burlington Gr. [Ety. proper name.]  
*logani var. aurora*, Hall, 1867, Pal. N. Y., vol. 4, Tully limestone & Ham. Gr. [Sig. the morning.]  
*maclurii*, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., vol. 3, Ham. Gr. [Ety. proper name.]  
*martini*, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., vol. 3, Ham. Gr. [Ety. proper name.]  
*melonica*, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Sig. a small melon.]  
*mesoloba*, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., vol. 3, Coal Meas. [Sig. middle-lobed.]  
*michiganensis*, Stevens, 1858, Am. Jour. Sci., vol. 25, Low. Carb. [Ety. proper name.]  
*millepunctata*, Meek & Worthen, 1870, Proc. Acad. Nat. Sci., Coal Meas. [Sig. many-dotted.]  
*minima*, Hall, 1876, 28th Reg. Rep. Niagara Gr. [Sig. least.]  
*mucronata*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Corniferous & Ham. Gr. [Sig. sharp-pointed.]  
*mucronata*, Meek & Hayden, 1858, Proc. Acad. Nat. Sci., Coal Meas. This name was preoccupied, moreover it is a syn. for *C. granulifera*.  
*multicosta*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. many-ribbed.]  
*muricata*, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Sig. like the shell *Murex*.]  
*nova-scotica*, Hall, 1860, Can. Nat. & Geo., vol. 5, Up. Sil. [Ety. proper name.]  
*ornata*, Shumard, 1855, Geo. of Mo., Chemung Gr. [Sig. ornamented.]  
*parva*, Shumard, 1855, Geo. of Mo., Coal Meas. [Sig. small.]  
*permiana*, Shumard, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]  
*planumbona*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci., Keokuk Gr. [Sig. smooth on the *umbo*.]  
*platynota*, White, 1874, Rep. Invert. Foss., Low. Carb. [Ety. *platys*, broad; *notos*, ridge.]  
*pulchella*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. beautiful.]  
*pusilla*, Hall, 1857, 10th Reg. Rep., Ham. Gr. [Sig. very small.]  
*scitula*, Hall, 1857, 10th Reg. Rep., Ham. Gr. [Sig. pretty.]

- setigera, Hall, 1843, (*Strophomena setigera*) Geo. Rep. 4th Dist. N. Y., Ham. & Chemung Gr. [Sig. having bristles.]
- shumardiana, DeKoninck, 1847, Recherches sur les Anim. Foss., Low. Carb. [Ety. proper name.]
- smithi, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., vol. 3, Coal Meas. [Ety. proper name.]
- syrtalis*, syn. for *C. carinata*.
- tenuistriata, Hall, 1860, Can. Nat. and Geo., vol. 5, Up. Sil. [Sig. fine-lined.]
- tuomeyi, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., vol. 3, Ham. Gr. [Ety. proper name.]
- variolata, DeKoninck, 1847, Recher. Anim. Foss., Coal Meas. [Sig. spotted with pimples.]
- verneuiliana, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., vol. 3, Coal Meas. [Ety. proper name.]
- yandelliana, Hall, 1857, 10th Reg. Rep., Corniferous Gr. [Ety. proper name.]
- CELOSPIRA**, Hall, 1858, Trans. Alb. Inst., vol. 4. [Ety. *koilos*, hollow; *spira*, a spire.]
- concava, Hall, 1859, (*Leptocelia concava*) Pal. N. Y., vol. 3, Corniferous Gr. [Sig. concave.]
- dichotoma, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. dividing into two.]
- disparilis, Hall, 1852, (*Atrypa disparilis*) Pal. N. Y., vol. 2, Niagara Gr. [Sig. different, unequal.]
- CRANIA**, Retzius, 1781, Schriften der Berliner Gesellschaft Naturforschende Freund. [Ety. *kranion*, the upper part of a skull.]
- acadiensis, Hall, 1860, Can. Nat. & Geo., vol. 5, Up. Sil. [Ety. proper name.]
- aurora, Hall, 1863, 16th Reg. Rep. Schoharie Grit. [Sig. morning.]
- bella, Billings, 1874, Pal. Foss., vol. 2, passage beds between Upper Sil. & Devonian. [Sig. beautiful.]
- bordeni, Hall, 1872, 24th Reg. Rep., Devonian. [Ety. proper name.]
- corrugata, Hall, 1843, (*Orbicula corrugatus*) Geo. Rep. N. Y., Niagara Gr. [Sig. corrugated.]
- crenistriata, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. convex-lined.]
- deformata, Hall, 1847, (*Orbicula deformata*) Pal. N. Y., vol. 1, Chazy Gr. [Sig. deformed.] Is it a *Crania*?
- dyeri, S. A. Miller, 1875, Cin. Quar. Jour. Sci., vol. 2, Cin'ti Gr. [Ety. proper name.]
- excentrica, Emmons, 1856, (*Orbicula excentrica*) Am. Geol., Quebec Gr. [Sig. from the center.]
- famelica, Hall, 1873, 23rd Reg. Rep., Chemung Gr. [Sig. famished.]
- gregaria, Hall, 1863, 16th Reg. Rep., Ham. Gr. [Sig. occurring in flocks.]
- hamiltoniae, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Ety. proper name.]
- laelia, Hall, 1866, Pamphlet, Cin'ti Gr. [Ety. proper name.]
- leoni, Hall, 1860, 13th Reg. Rep. N. Y., Chemung Gr. [Ety. proper name.]
- modesta, White & St. John, 1868, Trans. Chi. Acad. Sci., Coal Meas. [Sig. not large, modest.]
- multipunctata, S. A. Miller, 1875, Cin. Quar. Jour. Sci., vol. 2, Cin'ti Gr. [Sig. many-dotted.]
- permiana, Shumard, 1859, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- prima, Owen, 1852, (*Orbicula prima*) Geo. Sur. Iowa, Wis. & Minn., Potsdam Gr. [Sig. first.]
- quadrucostata, Vanuxem, 1842, (*Orbicula quadrucostata*) Geo. Rep. 3rd Dist. N. Y., Genessee slate. [Sig. four-ribbed.]
- radicans, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. rooting; in allusion to the spines on the exterior.]
- reposita, White, 1866, Proc. Bost. Soc. Nat. Hist., vol. 9, Ham. Gr. [Sig. remote, distant.]
- reticularis, S. A. Miller, 1875, Cin. Quar. Jour. Sci., vol. 2, Cin'ti Gr. [Sig. reticulated.]
- scabiosa, Hall, 1866, Pamphlet, Cin'ti Gr. [Sig. scabby.]
- setifera, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. bearing bristles.]
- setigera, Hall, 1866, Pamphlet, Trenton Gr. [Sig. having bristles.]
- sheldoni, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Ham. Gr. [Ety. proper name.]
- siluriana, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Ety. proper name.]
- tenuilamellata, Hall, 1852, (*Orbicula tenuilamellata*) Pal. N. Y., vol. 2, Niagara Gr. [Sig. having very thin plates.] This species is also classed with the *Discina*.
- trentonensis, Hall, 1866, Pamphlet, Trenton Gr. [Ety. proper name.]
- truncata, Emmons, 1856, (*Orbicula truncata*) Am. Geol., Trenton Gr. [Sig. truncated.]
- CRYPTONELLA**, Hall, 1861, 14th Reg. Rep. [Sig. a little cavity.] Prof. Billings regarded this as a synonym for *Charionella*.]
- calvini, Hall, 1870, 23rd Reg. Rep. N. Y., Chemung Gr. [Ety. proper name.]
- eudora, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Ety. proper name.]
- iphis, Hall, 1867, Pal. N. Y., vol. 4, Corniferous Gr. [Ety. mythological name.]
- lens*, see *Terebratula lens*.
- lincklæni*, see *Terebratula lincklæni*.
- planirostra, Hall, 1860, (*Terebratula planirostra*) 13th Reg. Rep., Ham. Gr. [Sig. smooth-beaked.]

- rectirostra, Hall, 1860, (*Terebratula rectirostra*) 13th Reg. Rep. Ham. Gr. [Sig. straight-beaked.]
- CYRTIA, Dalman, 1827, Kongl. Vet. Acad. Handl. [Ety. *kyrtia*, a fishing basket.]
- acutirostris*, see *Cyrtina acutirostris*.
- biplicata*, see *Cyrtina biplicata*.
- curvilineata*, see *Cyrtina curvilineata*.
- dalmani*, see *Cyrtina dalmani*.
- exporrecta*, Wahlenberg, 1821, Nova Acta. Regiae. Soc. Sci., vol. 8, Niagara Gr., as identified by Hall in 24th Reg. Rep. [Sig. smooth, without wrinkles.]
- exporrecta var. arrecta*, Niagara Gr., as identified by Hall in 24th Reg. Rep. [Sig. erected, steep.]
- hamiltonensis*, see *Cyrtina hamiltonensis*.
- missouriensis*, see *Cyrtina missouriensis*.
- myrtea*, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Ety. proper name.]
- occidentalis*, see *Cyrtina occidentalis*.
- rostrata*, see *Cyrtina rostrata*.
- triquetra*, see *Cyrtina triquetra*.
- umbonata*, see *Cyrtina umbonata*.
- CYRTINA, Davidson, 1858, Monog. Brit. Carb. Brach. [Ety. the diminutive of *Cyrtia* is *Cyrtidium*, but the author said he preferred bad Greek to a long name.]
- acutirostris*, Shumard, 1855, (*Cyrtia acutirostris*) Geo. Rep. Mo., Chemung Gr. [Sig. sharp-beaked.]
- affinis*, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Sig. near to.]
- billingsi*, Meek, 1868, Trans. Chi. Acad. Sci., Ham. Gr. [Ety. proper name.]
- biplicata*, Hall, 1857, (*Cyrtia biplicata*) 10th Reg. Rep., Schoharie grit and Cornif. Gr. [Sig. double-plicated.]
- crassa*, Hall, 1867, Pal. N. Y., vol. 4, Cornif. Gr. [Sig. thick.]
- curvilineata*, White, 1865, (*Cyrtia curvilineata*) Proc. Bost. Soc. Nat. Hist., vol. 9, Ham. Gr. [Sig. having bent lines.]
- dalmani*, Hall, 1857, (*Cyrtia dalmani*) 10th Reg. Rep., Low. Held. Gr. [Sig. proper name.]
- hamiltonensis*, Hall, 1857, (*Cyrtia hamiltonensis*) 10th Reg. Rep., Schoharie grit, Cornif. and Ham. Gr. [Ety. from the Hamilton group.]
- hamiltonensis var. recta*, Hall, 1867, Pal. N. Y., vol. 4, Ham. Gr. [Sig. straight.]
- missouriensis*, Swallow, 1860, (*Cyrtia missouriensis*) Trans. St. Louis Acad. Sci., Ham. Gr. [Ety. proper name.]
- occidentalis*, Swallow, 1860, (*Cyrtia occidentalis*) Trans. St. Louis Acad. Sci., Ham. Gr. [Sig. western.]
- panda*, Meek, 1868, Trans. Chi. Acad. Sci., Ham. Gr. [Sig. bent downwards.]
- pyramidalis*, Hall, 1852, (*Spirifer pyramidalis*) Pal. N. Y., vol. 2, Niagara Gr. [Sig. pointed like a pyramid.]
- rostrata*, Hall, 1857, (*Cyrtia rostrata*) 10th Reg. Rep., Oriskany sandstone. [Sig. beaked.]
- triquetra*, Hall, 1858, (*Cyrtia triquetra*) Geo. Rep. Iowa, vol. 1, pt. 2, Ham. Gr. [Sig. a triangle.]
- umbonata*, Hall, 1858, (*Cyrtia umbonata*) Geo. Rep. Iowa, vol. 1, pt. 2, Ham. Gr. [Sig. protuberant, bossed.]
- Delthyris*, Dalman, 1827, syn. for *Spirifera*.
- acanthoptera*, syn. for *Spirifera disjuncta*.
- acuminata*, Conrad, see *Spirifera acuminata*.
- acuminata*, Hall, syn. for *Spirifera mesacostalis*.
- acutilirata*, see *Orthis acutilirata*.
- arenosa*, see *Spirifera arenosa*.
- audacula*, see *Spirifera audacula*.
- bialveata*, see *Spirifera bialveata*.
- bilobata*, see *Orthis bilobata*.
- brachynota*, see *Spirifera brachynota*.
- chemungensis*, syn. for *Spirifera disjuncta*.
- congesta*, see *Spirifera congesta*.
- cuspidata*, syn. for *Spirifera disjuncta*.
- decemplicata*, see *Spirifera decemplicata*.
- delloidea*, syn. for *Orthis lynx*.
- disjuncta*, see *Spirifera disjuncta*.
- duodenaria*, see *Spirifera duodenaria*.
- duplicata*, see *Spirifera duplicata*.
- euruteines*, see *Spirifera euruteines*.
- expansa*, see *Pterotheca expansa*.
- fimbriata*, see *Spirifera fimbriata*.
- granulifera*, see *Spirifera granulifera*.
- granulosa*, see *Spirifera granulosa*.
- inermis*, see *Spirifera disjuncta*.
- laevis*, see *Spirifera laevis*.
- macronota*, see *Spirifera macronota*.
- macroleura*, see *Spirifera macroleura*.
- medialis*, see *Spirifera medialis*.
- mesacostalis*, see *Spirifera mesacostalis*.
- mesastrialis*, see *Spirifera mesastrialis*.
- microptera*, syn. for *Orthis lynx*.
- mucronata*, see *Spirifera mucronata*.
- niagarensis*, see *Spirifera niagarensis*.
- pachyoptera*, see *Spirifera pachyoptera*.
- perlata*, see *Spirifera disjuncta*.
- prolata*, see *Spirifera prolata*.
- prora*, see *Spirifera prora*.
- radiatus*, see *Spirifera radiata*.
- rarecosta*, see *Spirifera rarecosta*.
- rugatina*, see *Spirifera rugatina*.
- sculptilis*, see *Spirifera sculptilis*.
- staminea*, see *Spirifera staminea*.
- triloba*, see *Spirifera triloba*.
- undulatus*, see *Spirifera undulata*.
- varica*, see *Orthis varica*.
- ziczac*, see *Spirifera ziczac*.
- Dicraniscus*, Meek, syn. for *Camarella*.
- ortoni*, see *Camarella ortoni*.
- DINOBOULUS, Hall, March, 1871, notes on Brachiopoda. [Ety. *dis*, twice; *Obolus*, a genus of shells.]
- canadensis*, Billings, 1857, (*Obolus canadensis*) Rep. of Progr. Can. Sur., Black Riv. Gr. [Ety. proper name.]
- conradi*, Hall, 1865, (*Obolus conradi*) 20th Reg. Rep. N. Y., Niagara Gr. [Ety. proper name.]
- galtensis*, Billings, 1872, (*Obolellina galtensis*) Guelph Gr. [Ety. proper name.]

- magnificus*, Billings, 1872, (*Obolellina magnifica*) Canadian Naturalist, vol. 7, Black Riv. Gr. [Sig. magnificent.]
- DISCINA**, Lamarck, 1819, Hist. Nat. Anim. sans. Vert. [Ety. *discus*, a flat round plate; the termination *inus*, implying resemblance.]
- acadica*, Hartt, 1868, Acad. Geol., St. John's Gr. [Ety. proper name.]
- allegghania*, Hall, 1860, 13th Reg. Rep., Chemung Gr. [Ety. proper name.]
- ampla*, Hall, 1867, Pal. N. Y., vol. 4, Oriskany sandstone. [Sig. full sized.] Proposed instead of *D. grandis* of Hall.
- capax*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Chemung Gr. [Sig. capacious.]
- caputiformis*, syn. for *D. nitida*.
- circe*, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Ety. mythological name.] See remarks on *D. lamellosa*.
- conradi*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- convexa*, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. convex.]
- discus*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. a quoit.]
- doria*, Hall, 1863, 16th Reg. Rep., Ham. Gr. [Ety. mythological name.]
- elmira*, Hall, 1863, 16th Reg. Rep., Chemung Gr. [Ety. proper name.]
- gallaheri*, Winchell, 1865, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. proper name.]
- grandis*, Vanuxem, 1842, Geo. Rep. 3rd Dist. N. Y., Cornif. & Ham. Gr. [Sig. great.]
- grandis*, Hall, 1859, Pal. N. Y., vol. 3. The name was preoccupied. See *D. ampla*.
- humilis*, Hall, 1863, 16th Reg. Rep., Marcellus slate & Ham. Gr. [Sig. dwarfish.]
- inutilis*, Hall, 1863, 16th Reg. Rep., Potsdam Gr. [Sig. trifling.]
- lamellosa*, Hall, 1847, (*Orbicula lamellosa*). The name was preoccupied by Broderick in 1833. Billings has described it as *D. circe*.
- lodensis*, Vanuxem, 1842, (*Orbicula lodensis*) Geo. Rep. 3rd Dist. N. Y., Genesee slate. [Ety. proper name.]
- media*, Hall, 1863, 16th Reg. Rep., Ham. and Chemung Gr. [Sig. intermediate.]
- minuta*, Hall, 1843, (*Orbicula minuta*) Geo. Rep. 4th Dist. N. Y., Marcellus shale. [Sig. very small.]
- missouriensis*, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. Syn. for *D. nitida*.
- neglecta*, Hall, 1863, 16th Reg. Rep., Chemung Gr. [Sig. overlooked.]
- newberryi*, Hall, 1863, 16th Reg. Rep., Chemung Gr. [Ety. proper name.]
- nitida*, Phillips, 1836, (*Orbicula nitida*) Geo. of York., Coal Meas. [Sig. neat, smooth.]
- patellaris*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. a small plate.]
- pelopea*, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Ety. mythological name.]
- pleuritis*, Meek, 1875, Ohio Pal., vol. 2, Waverly Gr. [Ety. from *pleuron*, the side.]
- randalli*, Hall, 1863, 16th Reg. Rep., Ham. Gr. [Ety. proper name.]
- seneca*, Hall, 1863, 16th Reg. Rep., Ham. Gr. [Ety. proper name.]
- subtrigonalis*, McChesney, 1865, Desc. New Pal. Foss., Coal Meas. [Sig. somewhat triangular.]
- tenuilamellata*, Hall, 1852, (*Orbicula tenuilamellata*) Pal. N. Y., vol. 2, Niagara Gr. [Sig. having very thin plates.]
- tenuilamellata*, var. *subplana*, Hall, 1860, Can. Nat. and Geol., vol. 5, Up. Sil. [Sig. somewhat smooth.]
- trigonalis*, syn. for *D. subtrigonalis*.
- truncata*, Hall, 1862, 16th Reg. Rep., Chemung Gr. and Genesee slate. [Sig. truncated.]
- tullia*, Hall, 1863, 16th Reg. Rep., Tully limestone. [Ety. proper name.]
- vanuxemi*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- EATONIA**, Hall, 1857, 10th Reg. Rep., [Ety. proper name.]
- eminens*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. eminent, standing out.]
- medialis*, Vanuxem, 1843, (*Atrypa medialis*) Geo. Rep. 3rd Dist. N. Y., Low. Held. Gr. [Sig. middle.]
- peculiaris*, Conrad, 1841, (*Atrypa peculiaris*) Ann. Rep. N. Y., Oriskany and Low. Held. Gr. [Sig. peculiar.]
- pumila*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. a dwarf or pigmy.]
- singularis*, Vanuxem, 1843, (*Atrypa singularis*) Geo. Rep. 3rd Dist. N. Y., Low. Held. Gr. [Sig. singular.]
- sinuata*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. marked with depressions.]
- whitfieldi*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Ety. proper name.]
- EICHWALDIA**, Billings, 1858, Rep. of Progr. [Ety. proper name.]
- anticostiensis*, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Ety. proper name.]
- concinna*, Hall, 1868, 20th Reg. Rep., Niagara Gr. [Sig. beautiful.]
- coralifera*, Hall, 1852, (*Atrypa coralifera*) Pal. N. Y., vol. 2, Niagara Gr. Prof. Davidson regards this shell as identical with *E. Capewelli*, which was described in 1848, in Bull. Soc. Geol. France, vol. 3. [Sig. coral-bearing.]
- gibbosa*, Hall, 1868, 20th Reg. Rep., Niagara Gr. [Sig. gibbous.]

- reticulata, Hall, 1862, (*Rhynchonella* (?) reticulata) Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. reticulated.]
- subtrigonalis, Billings, 1858, Rep. of Prog., Black Riv. Gr. [Sig. somewhat three-cornered.]
- Goniocelia*, syn. for *Pentagonia*.
- GYPIDULA, Hall, 1867, Pal. N. Y., vol. 4. [Ety. *gyps*, vulture; in allusion to the strongly incurved beak.]
- laeviuscula, Hall, 1867, Pal. N. Y., vol. 4, Devonian. [Sig. slightly smooth.]
- obsolescens*, see *Pentamerella obsolescens*.
- occidentalis, Hall, 1858, (*Pentamerus occidentalis*) Geo. Rep. Iowa, vol. 1, pt. 2, Ham. Gr. [Sig. western.]
- Hemipronites*, Pander, 1830. This name, never having been defined, has been superseded by *Streptorhynchus*, if the two names refer to the same form.
- Hipparionyx*, Vanuxem, 1842, Geo. 3rd Dist. N. Y. [Sig. colts hoof.] Syn. for *Orthis*. The genus was founded on a cast.
- consimilis*, Vanuxem, syn. for *Atrypa reticularis*.
- proximus*, syn. for *Orthis hipparionyx*.
- similaris*, Vanuxem, 1842, Geo. Rep. 3rd Dist. N. Y., Oriskany sandstone. [Sig. similar.]
- IPHIDEA, Billings, 1874, Pal. Foss., vol. 2. [Ety. proper name.]
- bella, Billings, 1874, Pal. Foss., vol. 2, Potsdam Gr. [Sig. beautiful.]
- labradoricus, Billings, 1861, (*Obolus labradoricus*) Pal. Foss., vol. 1, Potsdam Gr. [Ety. proper name.]
- sculptilis, Meek, 1872, Hayden's Geo. Rep., Quebec Gr. [Sig. carved.]
- KONINKIA, Suess, 1853. MS. published by Woodward, 1854, in Manual of Mollusca. [Ety. proper name.]
- americana, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Ety. proper name.]
- KUTORGINA, Billings, 1861, Pal. Foss., vol. 1. [Ety. proper name.]
- cingulata, Billings, 1861, Pal. Foss., vol. 1, Potsdam Gr. [Sig. encircled with lines.]
- LEIORHYNCHUS, Hall, 1860, 13th Reg. Rep. [Ety. *leios*, smooth; *rhynchos*, a beak.]
- dubius, Hall, 1867, Pal. N. Y., vol. 4, Marcellus shale. [Sig. doubtful.]
- globuliformis, Vanuxem, 1842, (*Atrypa globuliformis*) Geo., 3rd Dist. N. Y., Chemung Gr. [Sig. in the form of a globe.]
- huronensis, Nicholson, 1874, Geo. Mag. Lond., n. s., vol. 1, Ham. Gr. [Ety. proper name.]
- iris, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Ety. proper name.]
- kelloggi, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Ety. proper name.]
- limitaris, Vanuxem, 1842, (*Orthis limitaris*) Geo. 3rd Dist. N. Y., (*Atrypa limitaris*, 4th Dist. N. Y.) Marcellus shale. [Ety. supposed to be limited to, and to characterize, the Marcellus shale.]
- mesacostalis, Hall, 1843, (*Atrypa mesacostalis*) Geo. 4th Dist. N. Y., Chemung Gr. [Sig. middle-ribbed.]
- multicosta, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. many-ribbed.]
- mysia, Hall, 1867, Pal. N. Y., vol. 4, Marcellus shale. [Ety. proper name.]
- newberryi, Hall, 1873, 23rd Reg. Rep., Chemung Gr. [Ety. proper name.]
- quadrucostatus, Vanuxem, 1842, (*Orthis quadrucostata*) Geo. 3rd Dist. N. Y., Genesee slate. [Sig. four-ribbed.]
- sesquiplicatus, Winchell, 1866, Rep. Low. Penin. Mich., Ham. Gr. [Sig. a plication and a half.]
- sinuata, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Sig. wavy.]
- LEPTENA, Dalman, 1827, Kongl. Vet. Acad. Handl. [Ety. *leptos*, thin.]
- alternata*, see *Strophomena alternata*.
- alternistriata*, see *Strophomena alternistriata*.
- analoga*, see *Strophomena analoga*.
- aspera*, James, syn. for *L. sericea*.
- bipartita*, see *Strophomena bipartita*.
- camerata*, see *Strophomena camerata*.
- concava, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. concave.]
- decipiens, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Sig. doubtful.]
- deflecta*, see *Streptorhynchus deflecta*.
- deltoida*, see *Strophomena deltoida*.
- depressa*, see *Strophomena depressa*.
- fasciata*, see *Strophomena fasciata*.
- filitexta*, see *Strophomena filitexta*.
- fragaria*, syn. for *Productella subaculeata*.
- incrassata*, see *Strophomena incrassata*.
- indenta*, see *Strophodonta indenta*.
- laticosta*, syn. for *Tropidoleptus carinatus*.
- membranacea*, see *Productella hirsuta*.
- mesacosta, Shumard, 1855, Geo. Rep. Mo., Trenton Gr. [Sig. middle-ribbed.]
- nasuta*, see *Strophomena nasuta*.
- nucleata, Hall, 1857, 10th Reg. Rep., Oriskany sandstone. [Sig. keeled.]
- obscura*, see *Strophomena obscura*.
- orthididea*, see *Strophomena orthididea*.
- planconvexa*, see *Streptorhynchus planconvexa*.
- planumbona*, see *Streptorhynchus planumbona*.
- plicifera*, see *Strophomena plicifera*.
- profunda*, see *Strophodonta profunda*.
- punctulifera*, see *Strophodonta punctulifera*.
- quadrilatera*, syn. for *Strophomena rhomboidalis*.
- recta*, see *Streptorhynchus recta*.
- rugosa*, see *Strophomena rugosa*.
- semiovalis*, syn. for *L. sericea*.
- sericea*, Sowerby, 1839, Murch. Sil. Syst., Trenton to Clinton Gr. [Sig. silky.]
- sordida, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Sig. paltry.]



- subtenta*, see *Streptorhynchus subtentus*.  
*tenuilineata*, see *Strophomena tenuilineata*.  
*tenuistriata*, see *Strophomena tenuistriata*.  
*transversalis*, Dalman, 1827, Vet. Acad. Handl., Anticosti Gr. [Sig. crosswise.]  
*trilobata*, see *Strophomena trilobata*.  
**LEPTOBOLUS**, Hall, 1871, Pamphlet. [Sig. minute Obolus.]  
*insignis*, Hall, Pamphlet, Utica slate. [Sig. marked naturally.]  
*lepis*, Hall, 1871, Pamphlet, Cin'ti Gr. [Sig. a scale.]  
*occidentalis*, Hall, 1871, Pamphlet, Hud. Riv. Gr. [Sig. western.]  
**LEPTOCÆLIA**, Hall, 1857, 10th Reg. Rep., and 1859, 12th Reg. Rep. [Ety. *leptos*, minute; *kolia*, belly; in allusion to the shallow visceral cavity.]  
*acutiplicata*, Conrad, 1841, (*Atrypa acutiplicata*) Ann. Rep. N. Y., Up. Held. Gr. [Sig. sharply-plicated.]  
*concava*, see *Cœlospira concava*.  
*dichotoma*, see *Cœlospira dichotoma*.  
*disparilis*, see *Cœlospira disparilis*.  
*fimbriata*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. fringed.]  
*flabellites*, Conrad, 1841, (*Atrypa flabellites*) Ann. Rep. N. Y., Oriskany sandstone. [Sig. a fan.]  
*hemispherica*, Sowerby, 1839, (*Atrypa hemispherica*) Murch. Sil. Syst., Clinton Gr. [Sig. hemispherical.]  
*imbricata*, Hall, 1857, 10th Reg. Rep., Low. Held. Gr. [Sig. imbricating lamellæ of growth.]  
*intermedia*, Hall, 1860, Can. Nat. & Geo., vol. 5, Up. Sil. [Sig. intermediate.]  
*planoconvexa*, Hall, 1852, (*Atrypa planoconvexa*) Pal. N. Y., vol. 2, Clinton Gr. [Ety. *planus*, level; *convexus*, convex.]  
*propria*, syn. for *Leptocœlia flabellites*.  
**LINGULA**, Bruguiere, 1792, Encyc. Meth. [Ety. *lingula*, a little tongue.]  
*acuminata*, Conrad, 1839, Ann. Rep. N. Y., Potsdam and Calcif. Gr. [Sig. terminating sharply.]  
*acutirostra*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Clinton Gr. [Sig. sharp-beaked.]  
*aequalis*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. equal.]  
*alveata*, Hall, 1863, 16th Reg. Rep., Ham. Gr. [Sig. channeled.]  
*ampla*, Owen, 1852, Geo. Sur. Wis., Iowa and Minn., Potsdam Gr. [Sig. full-sized.]  
*antiqua*, Emmons, 1842, Geo. Rep. N. Y., Potsdam Gr. [Sig. ancient.]  
*antiquata*, Emmons, 1856, Am. Geol., Trenton Gr. [Sig. ancient.]  
*artemus*, Billings, 1874, Pal. Foss., vol. 2, Passage beds between Up. Sil. and Devonian. [Ety. proper name.]  
*attenuata*, Sowerby. The fossil referred by Hall to this species, is described by Billings under the name of *L. Daphne*.  
*aurora*, see *Lingulella aurora*.  
*belli*, Billings, 1859, Can. Nat. Geo., vol. 4, Chazy Gr. [Ety. proper name.]  
*briseis*, Billings, 1862, Pal. Foss., vol. 4, Trenton Gr. [Ety. proper name.]  
*canadensis*, Billings, 1862, Pal. Foss., vol. 1, Hud. Riv. Gr. [Ety. proper name.]  
*carbonaria*, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. pertaining to the Coal Measures.]  
*centrilineata*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. the central line from beak to base.]  
*ceryx*, Hall, 1863, 16th Reg. Rep., Schoharie grit. [Sig. a herald.]  
*clintoni*, Vanuxem, 1842, Geo. Rep. N. Y., Clinton Gr. [Ety. proper name.]  
 Syn. for *L. oblonga*.  
*cobourgensis*, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Ety. proper name.]  
*concentrica*, Conrad, 1839, Ann. Rep. N. Y., Genesee slate. [Sig. arranged in concentric lines.]  
*covingtonensis*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Cin'ti Gr. [Ety. proper name.]  
*crassa*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. thick.]  
*cuneata*, Conrad, 1839, Geo. Rep. N. Y., Medina sandstone. [Sig. wedge-shaped.]  
*curta*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Trenton Gr. [Sig. short.]  
*cuyahoga*, Hall, 1863, 16th Reg. Rep., Green shales, upper part of Chemung Gr. [Ety. proper name.]  
*cyane*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
*daphne*, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Ety. mythological name.] See *L. attenuata*.  
*delia*, Hall, 1863, 16th Reg. Rep., upper part of Ham. Gr. [Ety. mythological name.]  
*densa*, Hall, 1867, Pal. N. Y., vol. 4, upper part of Ham. Gr. [Sig. thick.]  
*desiderata*, Hall, 1863, 16th Reg. Rep., Corniferous Gr. [Sig. longed for, rare.]  
*elegantula*, syn. for *Lingula quadrata*.  
*elliptica*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Clinton Gr. The name was preoccupied by Phillips in 1836.  
*elliptica*, Emmons, 1856, Am. Geol. The name was preoccupied.  
*elongata*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. elongated.]  
*exilis*, Hall, 1860, 13th Reg. Rep., Marcellus shale. [Sig. thin, fine.]  
*eva*, Billings, 1861, Can. Nat. Geo., vol. 6, Black Riv. Gr. [Ety. proper name.]  
*forbesi*, Billings, 1862, Pal. Foss. vol. 1, Hud. Riv. & Mid. Sil. Gr. [Ety. proper name.]  
*halli*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Ety. proper name.]



- huronensis*, Billings, 1859, Can. Nat. Geo., vol. 4, Chazy & Black Riv. Gr. [Ety. proper name.]  
*insularis*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. upon an island.]  
*iole*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
*irene*, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
*iris*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
*kingstonensis*, Billings, 1862, Pal. Foss., vol. 1, Black Riv. Gr. [Ety. proper name.]  
*lamellata*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Clinton & Niagara Gr. [Sig. composed of thin plates.]  
*leaena*, Hall, 1863, 16th Reg. Rep., Ham. Gr. [Ety. proper name.]  
*ligea*, Hall, 1860, 13th Reg. Rep., upper part of Ham. Gr. [Ety. mythological name.]  
*ligea var.* Hall, 1867, Pal. N. Y., vol. 4, Portage Gr.  
*lucetia*, Billings, 1874, Pal. Foss., vol. 2, Passage beds between Up. Sil. and Devonian. [Ety. proper name.]  
*lyelli*, Billings, 1859, Can. Nat. Geo., vol. 4, Calcif. & Chazy Gr. [Ety. proper name.]  
*maida*, Hall, 1863, 16th Reg. Rep., Ham. Gr. [Ety. proper name.]  
*manni*, Hall, 1863, 16th Reg. Rep., Up. Held. Gr. [Ety. proper name.]  
*mantelli*, Billings, 1859, Can. Nat. Geo., vol. 4, Calcif. Gr. [Ety. proper name.]  
*manticula*, White, 1864, Rep. Invert. Foss., Quebec Gr. [Sig. a small wallet.]  
*mathewi*, Hartt, 1868, Acad. Geol., St. Johns Gr. [Ety. proper name.]  
*melie*, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Ety. mythological name.]  
*membranacea*, Winchell, 1863, Proc. Acad. Nat. Sci. Phil., vol. 15, Low. Carb. [Sig. like a membrane.]  
*minuta*, Meek, 1868, Trans. Chi. Acad. Sci., Devonian. [Sig. very small.]  
*mosia*, Hall, 1863, 16th Reg. Rep., Potsdam Gr. [Ety. proper name.]  
*murrayi*, Billings, 1874, Pal. Foss., vol. 2, Potsdam Gr. [Ety. proper name.]  
*mytiloides*, Sowerby, 1812, Min. Conch., Tab. 19, Coal Meas. [Sig. like the *Mytilus*, or mussel shell.]  
*nebrascensis*, Meek, 1872, Pal. E. Neb., Coal Meas. [Ety. proper name.]  
*norwoodi*, James, 1875, Cin. Quar. Jour. Sci., vol. 2, Cin'ti Gr. [Ety. proper name.]  
*nuda*, Hall, 1863, 16th Reg. Rep., Ham. Gr. [Sig. naked.]  
*nympha*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
*oblata*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Clinton Gr. [Sig. oblate.]  
*oblonga*, Conrad, 1839, Ann. Rep. N. Y., Clinton Gr. [Sig. rather oblong.]  
*obtusa*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. obtuse.]  
*ovata*, McCoy, 1844, Syn. Sil. Foss., Ireland. Not clearly identified in America.  
*paliformis*, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. shovel-like.]  
*papillosa*, Emmons, 1856, Am. Geol., Trenton Gr. [Sig. covered with pimples.]  
*perlata*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. very wide.]  
*perovata*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. very ovate or nearly round.]  
*perryi*, Billings, 1861, Pal. Foss., vol. 1, Black Riv. Gr. [Ety. proper name.]  
*philomela*, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Ety. mythological name.]  
*pinniformis*, see *Lingulepis pinniformis*.  
*polita*, see *Obolella polita*.  
*prima*, see *Lingulepis prima*.  
*prima*, Emmons, 1856, Am. Geol. This name was preoccupied.  
*progne*, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Ety. mythological name.]  
*punctata*, Hall, 1863, 16th Reg. Rep., Ham. Gr. [Sig. dotted.]  
*quadrata*, Eichwald, 1829, Zool. Specialis., vol. 1, Trenton to Mid. Sil. [Ety. in allusion to the somewhat four-sided shape.]  
*quebecensis*, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
*rectilatera*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. straight-sided.] This name was preoccupied.  
*rectilateralis*, Emmons, 1842, Geo. Rep. N. Y., Utica slate. [Sig. straight-sided.]  
*riciniformis*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. like a tike or tick.]  
*scotica*, Davidson, 1860, Monogr. Scot. Carb. Brach., Waverly Gr. [Ety. proper name.]  
*spathata*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. spatula-shaped.]  
*spatiosa*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. large.]  
*spatulata*, Vanuxem, 1842, Geo. Rep. 3rd and 4th Dist. N. Y., Genessee slate. [Sig. spatula-shaped.]  
*subspatulata*, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Ham. Gr. [Sig. somewhat spatula-shaped.]  
*trentonensis*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Trenton Gr. [Ety. proper name.]  
*umbonata*, Cox, 1857, Geo. Sur. Ky., vol. 3, Coal Meas. [Sig. protuberant.]

- vanhorni, S. A. Miller, 1875, Cin. Quar. Jour. Sci., vol. 2, Cin'ti Gr. [Ety. proper name.]
- winona, Hall, 1863, 16th Reg. Rep., Potsdam Gr. [Ety. proper name.]
- LINGULELLA, Salter, 1861, Mem. Geo. North Wales. [Ety. diminutive of *Lingula*.]
- (?) affinis, Billings, 1874, Pal. Foss., vol. 2, Potsdam Gr. [Sig. near to.]
- aurora, Hall, 1861, (*Lingula aurora*) Geo. Rep. Wis., Potsdam sandstone. [Sig. morning.]
- cincinnatiensis, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Cin'ti Gr. [Ety. proper name.]
- lamborni, Meek, 1871, Proc. Acad. Nat. Sci., Potsdam Gr. [Ety. proper name.]
- (?) spissa, Billings, 1874, Pal. Foss., vol. 2, Potsdam Gr. [Sig. thick.]
- LINGULEPIS, Hall, 1863, 16th Reg. Rep. [Ety. *lingula*, a little tongue; *lepis*, a scale.]
- morsii, N. H. Winchell, 1876, (*Lingula morsensis*) Geol. Fillmore Co., Minn., St. Peters sandstone. [Ety. proper name—in honor of Mr. Morse.]
- pinniformis, Owen, 1852, (*Lingula pinniformis*) Geo. Rep. Iowa, Wis. & Minn. Potsdam Gr. [Sig. like the *Pinna*.]
- prima, Conrad, 1847, (*Lingula prima*) Pal. N. Y., vol. 1, Potsdam Gr. [Sig. first.]
- LINGULOPS, Hall, 1871, notes on Brachiopoda. [Ety. *lingula*, a genus of shells; *opsis*, appearance.]
- whitfieldi, Hall, 1871, notes on Brachiopoda, Low. Sil. [Ety. proper name.]
- MARTINIA, McCoy, 1844, syn. Carb. Foss., Ireland. [Ety. proper name.]
- athyroides, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Ety. resembling an *athyris*.]
- planoconvexa*, syn. for *Spirifera planoconvexa*.
- MEEKELLA, White & St. John, 1868, Trans. Chi. Acad. Sci. [Ety. proper name.]
- striato-costata, Cox, 1857, (*Plicatula striato-costata*) Geo. Rep. Ky., vol. 3, Coal Meas. [Ety. *striatus*, lined; *costatus*, ribbed.]
- Megasteria aequiradiata*, see *Rensseleria aequiradiata*.
- cumberlandia*, see *Rensseleria cumberlandia*.
- elliptica*, see *Rensseleria elliptica*.
- elongata*, see *Amphigenia elongata*.
- laevis*, see *Rensseleria laevis*.
- mutabilis*, see *Rensseleria mutabilis*.
- ovalis*, see *Rensseleria ovalis*.
- ovoides*, see *Rensseleria ovoides*.
- subtrigonalis*, see *Amphigenia elongata* var. *subtrigonalis*.
- suessiana*, see *Rensseleria suessiana*.
- MERISTA, Suess, 1851, Jahrb. Geol. Reichs. Austalt. [Ety. *meros*, a part.]
- arcuata, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. bent or arched.]
- barrisi, Hall, 1862, 15th Reg. Rep., Marcellus shale. [Ety. proper name.]
- bella, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. beautiful.]
- bisulcata, Vanuxem, 1843, (*Atrypa bisulcata*) Geo. Rep. 3rd Dist. N. Y., Low. Held. Gr. [Sig. double-depressed.]
- doris, Hall, 1862, 15th Reg. Rep., Marcellus shale. [Ety. mythological name.]
- haskinsi, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Ety. proper name.]
- houghtoni, Winchell, 1862, Proc. Acad. Nat. Sci., Portage Gr. [Ety. proper name.]
- laevis, Vanuxem, 1843, (*Atrypa laevis*) Geo. Rep. 3rd Dist. N. Y., Low. Held. Gr. [Sig. smooth.]
- lata, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. broad.]
- lens, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. a lentil, here signifying a double convex *Merista*.]
- meeki, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- princeps, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. primitive.]
- subquadrata, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. somewhat four-cornered.]
- sulcata, Vanuxem, 1842, (*Atrypa sulcata*) Geo. Rep. N. Y., Water Lime Gr. [Sig. wavy.]
- MERISTELLA, Hall, 1860, 13th Reg. Rep. [Ety. diminutive of *Merista*.]
- barrisi, Hall, 1860, 13th Reg. Rep., Marcellus shale & Ham. Gr. [Ety. proper name.]
- cylindrica, Hall, 1852, (*Atrypa cylindrica*) Pal. N. Y., vol. 2, Clinton & Niagara Gr. [Sig. cylindrical.]
- doris, 1860, Hall, 13th Reg. Rep., Schoharie Grit & Corniferous Gr. [Ety. mythological name.]
- elissa*, syn. for *Meristella nasuta*.
- haskinsi, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Ety. proper name.]
- (?) hyale, Billings, 1862, (*Charionella* (?) *hyale*) Pal. Foss., vol. 1, Guelph Gr. [Ety. proper name.]
- julia, Billings, 1862, (*Athyris julia*) Pal. Foss., vol. 1, Mid. Sil. [Ety. proper name.]
- lenta, Hall, 1867, Pal. N. Y., vol. 4, Oriskany sandstone. [Sig. heavy.]
- maria*, see *Meristina maria*.
- meta, Hall, 1867, Pal. N. Y., vol. 4, Ham. Gr. [Sig. having a conical form.]
- multicosta, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Sig. having many costae.]
- nasuta, Conrad, 1840, (*Atrypa nasuta*) Ann. Rep. N. Y., Schoharie Grit, Up. Held. Corniferous & Ham. Gr. [Sig. having a prominent nose.]
- prinstana, Billings, 1862, (*Athyris prinstana*) Pal. Foss., vol. 1, Mid. Sil. [Ety. proper name.]

- rostrata, Hall, 1843, (*Atrypa rostrata*) Geo. Rep. 4th Dist. N. Y., Ham. Gr. & Tully limestone. [Sig. beaked.]
- scitula, Hall, 1843, (*Atrypa scitula*) Geo. 4th Dist. N. Y., Corniferous Gr. Prof. Hall regards *Charionella circe* as a syn. for this species. [Sig. pretty.]
- umbonata, Billings, 1862, (*Athyris umbonata*) Pal. Foss., vol. 1, Mid. Sil. [Sig. protuberant.]
- uniusulcata, Conrad, 1841, (*Atrypa uniusulcata*) Ann. Rep. N. Y., Up. Held. & Ham. Gr. [Sig. having one depression.]
- MERISTINA, Hall, 1867, 20th Reg. Rep. N. Y. [Ety. *Merista*, a genus of shells; *inus*, implying resemblance.]
- maria, Hall, 1863, (*Meristella maria*) Trans. Alb. Inst., vol. 4, Niagara Gr. [Ety. proper name.]
- nitida, Hall, 1852, (*Atrypa nitida*) Pal. N. Y., vol. 2, Niagara Gr. [Sig. smooth.]
- nitida *var.* oblata, Hall, 1852, (*Atrypa nitida var. oblata*) Pal. N. Y., vol. 2, Niagara Gr. [Sig. oblate.]
- MONOMERELLA, Billings, 1861, Can. Nat. & Geo., vol. 6. [Ety. *monos*, one; *meros*, a part; *ella*, diminutive termination.]
- newberryi, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Ety. proper name.]
- orbicularis, Billings, 1871, Can. Nat., vol. 6, Guelph Gr. [Sig. orbicular.]
- prisca, Billings, 1871, Can. Nat. & Geo., vol. 6, Guelph Gr. [Sig. ancient.]
- NUCLEOSPIRA, Hall, 1859, Pal. N. Y., vol. 3. [Ety. *nucleus*, a kernel; *spira*, a spire.]
- barrisi, White, 1860, Bost. Jour. Nat. Hist., Kinderhook Gr. [Ety. proper name.]
- concentrica, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. concentrically lined.]
- concinna, Hall, 1843, (*Atrypa concinna*) Geo. 4th Dist. N. Y., Hamilton Gr. [Sig. handsome.]
- elegans, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. elegant.]
- pisiformis, Hall, 1859, (*Orthis pisum*, 1851, Pal. N. Y., vol. 2.) Pal. N. Y., vol. 3, Niagara Gr. [Ety. from its resemblance to *Spirifer pisum* of Murchison.]
- ventricosa, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. This species was first described in 1856, in 9th Reg. Rep., as *Spirifera ventricosa*. [Sig. bulging out.]
- OBOLELLA, Billings, 1861, Pal. Foss., vol. 1. [Ety. diminutive of *Obolus*, a small Greek coin.]
- cælata, Hall, 1847, (*Orbicula cælata*) Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. sculptured.]
- chromatica, Billings, 1861, Pal. Foss., vol. 1, Potsdam Gr. [Sig. colored.]
- cingulata, Billings, 1861, Pal. Foss., vol. 1, Potsdam Gr. [Sig. encircled with lines.]
- circe, Billings, 1871, Can. Nat. and Geol., Potsdam Gr. [Ety. mythological name.]
- crassa, Hall, 1847, (*Orbicula crassa*) Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. thick.]
- desiderata, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Sig. rare.]
- desquamata, Hall, 1847, (*Avicula desquamata*) Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. scaled off.]
- gemma, Billings, 1871, Can. Nat. & Geol., Potsdam Gr. [Sig. a young bud.]
- ida, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]
- miser, Billings, 1874, Pal. Foss., vol. 2, Low. Potsdam Gr. [Sig. paltry.]
- nana, Meek & Hayden, 1861, Proc. Acad. Nat. Sci. Phil., Potsdam Gr. [Sig. dwarfish.]
- nitida, Ford, 1863, Am. Jour. Sci. & Arts, 3rd ser., vol. 5, Low. Potsdam Gr. [Sig. neat.]
- polita, Hall, 1861, Geo. Rep. Wis., (*Lingula polita*) Potsdam Gr. [Sig. smoothed.]
- pretiosa, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Sig. valuable, precious.]
- transversa, Hartt, 1868, Acad. Geol., St. John's Gr. [Ety. from the transversely oval form.]
- Obolellina, Billings, Dec., 1871, syn. for *Dinobolus*.
- canadensis*, see *Dinobolus canadensis*.
- galtensis*, see *Dinobolus galtensis*.
- magnifica*, see *Dinobolus magnificus*.
- OBOLUS, Eichwald, 1829, Zoologia Specialis, vol. 1. [Ety. *obolus*, a small coin.]
- canadensis*, see *Dinobolus canadensis*.
- conradi*, see *Dinobolus conradi*.
- galtensis*, see *Trimerella galtensis*.
- labradoricus*, see *Iphidea labradorica*.
- (?) *murrayi*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]
- Orbicula, Cuvier, 1808, syn. for *Crania*.
- cælata*, see *Obolella cælata*.
- cancellata*, see *Trematis cancellata*.
- corrugata*, see *Crania corrugata*.
- crassa*, see *Obolella crassa*.
- deformata*, see *Crania deformata*.
- excentrica*, see *Crania excentrica*.
- filosa*, see *Schizocrania filosa*.
- grandis*, see *Discina grandis*.
- lamellosa*, see *Discina lamellosa*.
- lodensis*, see *Discina lodensis*.
- minuta*, see *Discina minuta*.
- nitida*, see *Discina nitida*.
- prima*, see *Crania prima*.
- quadriscopata*, see *Crania quadriscopata*.
- squamiformis*, see *Pholidops squamiformis*.
- subtruncata*, see *Pholidops subtruncatus*.
- tenuilamellata*, see *Crania tenuilamellata*.
- terminalis*, see *Trematis terminalis*.
- truncata*, see *Crania truncata*.
- ORTHIS, Dalman, 1827, Kongl. Vet. Acad. Handl. [Ety. *orthos*, straight, in allusion to the straight hinge line.]

- acuminata*, Billings, 1859, Can. Nat. Geo., vol. 4, Chazy Gr. [Sig. sharp-pointed.]  
*acutilirata*, Conrad, 1842, (Delthyris acutilirata) Jour. Acad. Nat. Sci., vol. 8, Cin'ti Gr. [Sig. sharply ridged.]  
*aequalvalvis*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. equal-valved.]  
*aequalva*, Shaler. The name was preoccupied.  
*aequalvalvis*, Hall, 1857, syn. for *Orthis eryna*.  
 Moreover the name was preoccupied.  
*alata*, Shaler. The name was preoccupied.  
*alsus*, Hall, 1863, 16th Reg. Rep., Schoharie Grit. [Sig. cold. (?)]  
*anticostiensis*, syn. for *Orthis porcata*.  
*apicalis*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. sharp-pointed.]  
*arcostriata*, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. closely striated.]  
*armanda*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
*assimilis*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. very-like.]  
*aurelia*, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Ety. proper name.]  
*barabuenensis*, Winchell, 1864, Am. Jour. Sci. & Arts, 2nd ser., vol. 37, Potsdam Gr. [Ety. proper name.]  
*battis*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
*bellarugosa*, Conrad, 1843, Proc. Acad. Nat. Sci. Phil., vol. 1, Trenton Gr. [Sig. beautifully wrinkled.]  
*bellula*, James, 1873, Ohio Pal., vol. 1, Cin'ti Gr. [Sig. pretty.]  
*biforata*, Schlotheim, 1820, (Terebratulites biforatus) Petrefact., Trenton & Hud. Riv. Gr. [Sig. two-holed or double-doored.]  
*billingsi*, Hartt, 1868, Acad. Geol., St. John's Gr. [Ety. proper name.]  
*biloba*, Linnæus, 1749, (Anomia biloba) Linne. Syst., Niagara Gr. [Sig. two-lobed.]  
*bilobata*, Conrad, 1838, (Delthyris bilobata) Ann. Rep. N. Y., Low. Held. Gr. The name was preoccupied by Sowerby.  
*bisulcata*, see *Camarella bisulcata*.  
*borealis*, Billings, 1859, Can. Nat. Geo., vol. 4, Chazy & Trenton Gr. [Sig. northern.]  
*carbonaria*, Swallow, 1858, syn. for *Orthis pecosi*.  
*carinata*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Portage & Chemung Gr. [Sig. keeled.]  
*carleyi*, syn. for *Orthis retrorsa*.  
*centrinilincata*, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Ety. *centrum*, center; *lineatus*, striated.]  
*circulus*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Clinton Gr. [Sig. a circle.]  
*clarkensis*, Swallow, 1863, Trans. St. Louis Acad. Sci., Keokuk Gr. [Ety. proper name.]  
*cleobis*, Hall, 1863, 16th Reg. Rep., Onondaga limestone & Up. Held. Gr. [Ety. mythological name.]  
*clytie*, Hall, 1861, 14th Reg. Rep., Cin'ti Gr. [Ety. mythological name.]  
*coloradoensis*, Shumard, 1860, Trans. St. Louis Acad. Sci., Potsdam Gr. [Ety. proper name.]  
*coloradoensis*, Meek, 1870, see *O. desmopleura*.  
*concinna*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. handsome.]  
*cooperensis*, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Ety. proper name.]  
*corinna*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
*costalis*, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. [Sig. ribbed.]  
*costata*, Hall, 1845. This name was preoccupied by Sowerby in 1839.  
*crassa*, Meek, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Sig. thick.]  
*crispata*, Emmons, 1842, Geo. Rep. N. Y., Trenton Gr. [Sig. curled.]  
*cumberlandia*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Ety. proper name.]  
*cuneata*, Owen, 1852, Geo. Sur. Wis., Iowa and Minn., Devonian. [Sig. wedge-shaped.]  
*cyclas*, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. of a round form.]  
*cychus*, syn. for *Orthis multisecta*.  
*cypha*, syn. for *Orthis crassa*.  
*davidsoni*, Verneuil, 1840, Bull. Geol. Soc. France, vol. 5, Up. Sil. [Ety. proper name.]  
*deflecta*, see *Streptorhynchus deflectus*.  
*deformis*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. deformed.]  
*delicatula*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. quite delicate.]  
*dentata*, Pander, 1830, (Porambonites dentatus) Biert. Geogn. Russl., Trent. and Hud. Riv. Gr. [Sig. toothed.]  
*desmopleura*, Meek, 1870, Hayden's Geo. Rep., Silurian. [Ety. *desmos*, a band; *pleura*, the side.]  
*dichotoma*, syn. for *Orthis fissicosta*.  
*discus*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. a quoit.]  
*disparilis*, Conrad, 1843, Proc. Acad. Nat. Sci., vol. 1, Black Riv. & Trenton Gr. [Sig. different.]  
*dubia*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. doubtful.]  
*electra*, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
*elegantula*, Dalman, 1827, Kongl. Vet. Acad. Handl., Clinton & Niagara Gr. [Sig. quite elegant.]  
*ella*, Hall, 1861, 13th Reg. Rep., Cin'ti Gr. [Ety. proper name.]  
*emacerata*, Hall, 1860, 13th Reg. Rep., Cin'ti Gr. [Sig. made lean.]

- emarginata*, see *Orthis oblata* var. *emarginata*.]  
*eminens*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. conspicuous.]  
*erratica*, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. wandering.]  
*eryna*, Hall, 1867, (Corrigenda, *eryna*) Pal. N. Y., vol. 4, Cornif. Gr. [Ety. mythological name.] Named instead of *O. æquivalvis* in 10th Reg. Rep.  
*eudocia*, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
*euryone*, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
*evadne*, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
*fasciata*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. striped.]  
*fissicosta*, Hall, 1847, Pal. N. Y., vol. 1, Cin'ti Gr. [Sig. having divided costæ.]  
*fissiplica*, Roemer, 1860, Sil. Fauna West Tenn., Niagara Gr. [Sig. having divided plications.]  
*flabellum*, Hall, 1843. This name was preoccupied by Sowerby in 1839.  
*flava*, Winchell, 1865, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. yellow.]  
*gemicula*, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Sig. a little bud.]  
*gibbosa*, Billings, 1857, Rep. of Progr., Black Riv. Gr. [Sig. gibbous, tumid.]  
*hipparionyx*, Vanuxem, 1843, (Hipparionyx proximus) Geo. Rep. 3rd Dist. N. Y., Oriskany sandstone. [Sig. a colt's hoof.]  
*hippolyte*, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
*hybrida*, Sowerby, 1839, Murch. Sil. Syst., Niagara Gr. [Sig. a hybrid.]  
*idonea*, Hall, 1867, Pal. N. Y., vol. 4, Ham. Gr. [Sig. suitable.]  
*imperator*, Billings, 1859, Can. Nat. Geo., vol. 4, Chazy Gr. [Sig. chief.]  
*impressa*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. impressed.]  
*inequalis*, Hall, 1858, Geo. of Iowa, Ham. Gr. [Sig. unequal.]  
*insculpta*, Hall, 1847, Pal. N. Y., vol. 1, Trenton & Cin'ti Gr. [Sig. engraved.]  
*insignis*, see *Skenidium insignis*.  
*interlineata*, Sowerby, see *Orthis tioga*.  
*interstitialis*, Phillips, 1841, Pal. Foss., Devonian. [Sig. interstriated.] This species is probably foreign to America.  
*iowensis*, Hall, 1858, Geo. of Iowa, Ham. Gr. [Ety. proper name.]  
*iowensis* var. *furnarius*, Hall, 1858, Geo. of Iowa, Ham. Gr. [Sig. (?).]  
*iphigenia*, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Ety. mythological name.]  
*jamesi*, Hall, 1861, 14th Reg. Rep., Cin'ti Gr. [Ety. proper name.]  
*kankakensis*, McChesney, 1860, Desc. New Pal. Foss., Hud. Riv. Gr. [Ety. proper name.]  
*keokuk*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Ety. proper name.] This species was referred to *Orthis umbraculum* of DeKoninck by Owen.  
*lasallensis*, McChesney, 1860, New Pal. Foss. Prof. Meek regards this as a syn. for *Streptorhynchus crassus*.  
*laticosta*, James, 1873, Pal. Ohio, vol. 1, Cin'ti Gr. [Sig. broad-ribbed.]  
*laurentina*, Billings, 1857, Rep. of Geo. Sur. Can., Mid. Sil. [Ety. proper name.]  
*lenticularis*, Vanuxem, 1842, Geo. Rep. 3rd Dist. N. Y., Cornif. Gr. [Sig. lenticular.]  
*lentifformis*, Vanuxem, 1842, Geo. Rep. 3rd Dist. N. Y., Cornif. Gr. [Sig. lens-shaped.]  
*leonensis*, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Ety. proper name.]  
*lepida*, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. pretty.]  
*lepis*, as identified by d'Archiac & Verneuil. Not American.  
*leptenoides*, Emmons, 1842, Geo. Rep. N. Y., Trenton Gr. [Sig. in the form of a Leptaena.]  
*leucosia*, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Ety. proper name.]  
*limitaris*, see *Leiorhynchus limitaris*.  
*livia*, Billings, 1860, Can. Jour. Ind. Sci. and Art, Cornif. Gr. [Ety. Roman proper name.]  
*lucia*, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Ety. proper name.]  
*lynx*, Eichwald, 1830, (Terebratula lynx) Nat. Kizze von Podol., Trenton and Hud. Riv. Gr. [Ety. the name of a quadruped of the genus *Felis*.]  
*maria*, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Ety. *Maria*, Mary a proper name.]  
*macfarlani*, Meek, 1868, Trans. Chi. Acad. Sci., vol. 1, Ham. Gr. [Ety. proper name.]  
*media*, Shaler, 1865, Bul. No. 4, M. C. Z., Anticosti Gr. This is probably only a variety of *O. elegantula*.  
*meeki*, S. A. Miller, 1875, Cin. Quar. Jour. Sci., vol. 2, Cin'ti Gr. [Ety. proper name.] A variety of *O. testudinaria*.  
*merope*, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Ety. mythological name.]  
*michelini*, (Terebratula *michelini*) L'Eveille, 1835, Mem. Soc. Geol. France, vol. 2, Low. Carb. [Ety. proper name.]  
*michelini* var. *burlingtonensis*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Ety. proper name.]  
*minna*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
*missouriensis*, Shumard, 1855, Geo. Rep. Mo., Trenton Gr. [Ety. proper name.]  
*missouriensis*, Swallow, 1860, Trans. St. Louis Acad. Sci., Chemung Gr. This name was preoccupied.

- mitis*, Hall, 1863, 16th Reg. Rep., Schorharie grit. [Sig. moderate.]  
*morrowensis*, syn. for *Orthis ella* (?)  
*multisecta*, James, 1873, Ohio Pal., vol. 1, Cin'ti Gr. [Sig. having many paths.]  
*multistriata*, Hall, 1859, Pal. N. Y., vol. 3, Low Held. Gr. [Sig. many-striated.]  
*musculosa*, Hall, 1857, Pal. Foss., Oriskany sandstone. [Sig. full of muscles.]  
*mycale*, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
*nisis*, Hall, 1872, 24th Reg. Rep., Niagara Gr. [Ety. proper name.]  
*nucleus*, syn. for *Ambocelia umbonata*.  
*oblata*, Hall, 1859, Pal. N. Y., vol. 3, Low Held. Gr. [Sig. broader than long.]  
*oblata var. emarginata*, Hall, 1859, Pal. N. Y., vol. 3, Low Held. Gr. [Sig. notched at the end.]  
*occasus*, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. the west.]  
*occidentalis*, Hall, 1847, Pal. N. Y., vol. 1, Trenton to Hud. Riv. Gr. [Sig. western.]  
*orbicularis*, Sowerby, 1839, Murch. Sil. Syst., Up. Sil. [Sig. orbicular.]  
*orthambonites*, Pander, as figured by Murchison & Verneuil, 1845, Russia and Ural mountains, Quebec Gr. [Sig. straight-umbo.]  
*pecosi*, Marcon, 1858, Geo. N. America, Coal Meas. This species was subsequently described by Swallow under the name of *Orthis carbonaria*. [Ety. proper name.]  
*pecten*, as identified by d'Archiac & Verneuil. Not American.  
*pectinella*, Conrad, 1840, Ann. Rep. N. Y., Black Riv. & Trenton Gr. [Sig. a little comb.]  
*pectinella var. semiovalis*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. half-oval.]  
*peduncularis*, Hall, 1859, Pal. N. Y., vol. 3, Low Held. Gr. [Sig. a little foot.]  
*peloris*, Hall, 1863, 16th Reg. Rep., Schorharie grit. [Sig. *Peloris*, an existing shell fish.]  
*penelope*, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Ety. mythological name.]  
*pepina*, Hall, 1863, 16th Reg. Rep., Potsdam Gr. [Ety. proper name.]  
*perelegans*, Hall, 1859, Pal. N. Y., vol. 3, Low Held. Gr. [Sig. very elegant.]  
*perversa*, see *Streptorhynchus perversus*.  
*pervetus*, Conrad, 1843, Proc. Acad. Nat. Sci., vol. 1, Black Riv. & Trenton Gr. [Sig. very old.]  
*pigra*, Billings, 1859, Can. Nat. Geo., vol. 4, Chazy Gr. [Sig. sluggish.]  
*pisum*, see *Nucleospira pisiiformis*.  
*planoconvexa*, Hall, 1859, Pal. N. Y., vol. 3, Low Held. Gr. [Ety. *planus*, level; *convexus*, convex.]  
*platys*, Billings, 1859, Can. Nat. Geo., vol. 4, Chazy Gr. [Sig. broad.]  
*plicata*, Vanuxem, see *Spirifera vanuxemi*.  
*plicatella*, Hall, 1847, Pal. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Sig. a little fold or plait.]  
*porcata*, McCoy, 1846, Sil. Foss. of Ireland, Trenton, Hud. Riv. & Mid. Sil. [Sig. ridged.]  
*porcia*, Billings, 1859, Can. Nat. Geo., vol. 4, Chazy Gr. [Ety. proper name.]  
*præumbona*, see *Ambocelia præumbona*.  
*pratteni*, McChesney, 1860, New Pal. Foss., Coal Meas. [Ety. proper name.]  
*prava*, Hall, 1858, Geo. of Iowa, Ham. Gr. [Sig. crooked.]  
*propinqua*, Hall, 1857, 10th Reg. Rep. N. Y., Up. Held. Gr. [Sig. related to.]  
*punctostriata*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. *punctus*, pricked; *striatus*, striated.]  
*pyramidalis*, see *Skenidium pyramidalis*.  
*quadrucostata*, see *Leiorhynchus quadrucostatus*.  
*resupinata*, Martin, 1809, Petref. Derb. Carb. [Sig. upside down.]  
*resupinata*, Cox, 1857, Geo. Sur. Ky., vol. 3, Coal Meas. [Sig. like *O. resupinata*.]  
*retrorsa*, Salter, 1858, Geo. Sur. of G. B., Trenton & Hud. Riv. Gr. [Sig. turned backwards.]  
*rhynchonelliformis*, Shaler, 1865, Bul. No. 4, M. C. Z., Anticosti Gr. [Sig. like a shell of the genus *Rhynchonella*.]  
*richmonda*, syn. for *Streptorhynchus crassus*.  
*robusta*, Hall, 1858, Geo. Rep. Iowa, Coal Meas. [Sig. robust.]  
*rugiplicata*, Hall, 1872, 24th Reg. Rep., Niagara Gr. [Sig. wrinkled and plicated.]  
*ruida*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. rough.]  
*semele*, Hall, 1863, 16th Reg. Rep., Onondaga & Up. Held. Gr. [Ety. mythological name.]  
*sinuata*, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. waved.]  
*sola*, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. alone.]  
*solitaria*, Hall, 1860, 13th Reg. Rep., N. Y., Ham. Gr. [Sig. alone.]  
*stonensis*, Safford, 1869, Geo. of Tenn., Trenton & Nashville Gr. [Ety. proper name.]  
*striatula*, Emmons, 1842, Geo. Rep. N. Y. This name was preoccupied by Schlottheim.  
*strophomenoides*, Hall, 1859, Pal. N. Y., vol. 3, Low Held. Gr. [Sig. like *Strophomena*.]  
*subcarinata*, Hall, 1859, Pal. N. Y., vol. 3, Low Held. Gr. [Sig. somewhat keeled.]  
*subæquata*, Conrad, 1843, Proc. Acad. Nat. Sci., vol. 1, Chazy to Trenton Gr. [Sig. somewhat equal.]  
*subjugata*, syn. for *Orthis occidentalis*.



- suborbicularis, Hall, 1858, Geo. of Iowa, Ham. Gr. [Sig. somewhat orbicular.]
- subquadrata, Hall, 1847, Pal. N. Y., vol. 1, Trenton to Hud. Riv. Gr. [Sig. somewhat quadrate.]
- subumbona*, see *Spirifera subumbona*.
- swallowi*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Ety. proper name.]
- tenuidens, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. slender-toothed.]
- tenuistriata, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Portage Gr. [Sig. fine-striated.]
- testudinaria, Dalman, 1827, Vet. Acad. Handl., Trenton & Hud. Riv. Gr. [Sig. arched like a tortoise shell.]
- thiemii, White, 1860, Jour. Bost. Soc. Nat. Hist., vol. 7, Kinderhook Gr. [Ety. proper name.]
- tioga, Hall, 1867, Pal. N. Y., vol. 4, (O. interlineata, Sow., Geo. Rep. 4th Dist. N. Y.) Portage & Chemung Gr. [Ety. proper name.]
- tricenaria, Conrad, 1843, Proc. Acad. Nat. Sci., vol. 1, Trenton Gr. [Sig. of or belonging to thirty.]
- trinucleus, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. a triple-nut.]
- triplicatella, Meek, 1873, Ohio Pal., vol. 1, Cin'ti Gr. [Sig. having three plications in one-fold.]
- tritonia, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]
- tubulostrata, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. having tube-like striae.]
- tulliensis, Vanuxem, 1843, Geo. Rep. 3rd Dist. N. Y., Tully limestone. [Ety. proper name.]
- uberi, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. abundant, fruitful.]
- umbonata*, see *Ambocelia umbonata*.
- umbraculum*, DeKoninck, see *Orthis Keokuk* and *Streptorhynchus umbraculum*.
- unguiculus*, Phillips, as identified by Hall in 1843, see *Ambocelia umbonata* var. *gregaria*.
- unguiformis*, syn. for *Orthis hipparionyx*.
- vanuxemi, Hall, 1857, 10th Reg. Rep., Ham. Gr. [Ety. proper name.]
- vanuxemi*, Winchell, 1862, Proc. Acad. Nat. Sci., Portage Gr. The name was preoccupied.
- varica, Conrad, 1842, (Delthyris varica) Jour. Acad. Nat. Sci., vol. 8, Low. Held. Gr. [Sig. straddling.]
- ORTHISINA, D'Orbigny, 1849. [Ety. *orthis*, a genus of shells; *inus*, implying resembling to.]
- alternata*, see *Streptorhynchus perversus*.
- arctostriata*, see *Streptorhynchus arctostriatus*.
- crassa*, see *Streptorhynchus crassus*.
- diversa*, Shaler, syn. for *Orthisina verneuili*.
- festinata*, Billings, 1861, Pal. Foss., vol. 1, Potsdam Gr. [Sig. hasty.]
- grandæva*, Billings, 1859, Can. Nat. Geo., vol. 4, Calif. Gr. [Sig. primeval.]
- missouriensis*, Swallow, 1858. Syn. for *Meekella striato-costata*.
- occidentalis*, Swallow, 1863, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. western.]
- shumardiana*, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- verneuili*, Eichwald, as identified by Billings, Trenton & Anticosti Gr. [Ety. proper name.]
- PENTAGONIA, Cozzens, 1846, Ann. N. Y. Lyceum, vol. 3. [Ety. *pente*, five; *gonia*, an angle.]
- peersi*, Cozzens, 1846, Ann. N. Y. Lyceum, vol. 3, Devonian. [Ety. proper name.]
- PENTAMERELLA, Hall, 1867, Pal. N. Y., vol. 4. [Ety. diminutive of *Pentamerus*.]
- arata*, Conrad, 1841, (*Atrypa arata* and *Atrypa octo-costata*) Ann. Rep. N. Y., Schoharie grit and Up. Held. Gr. [Sig. plowed, furrowed.]
- dubia*, Hall, 1860, (*Spirifer dubius*) 13th Reg. Rep., Ham. Gr. [Sig. doubtful.]
- micula*, Hall, 1867, Pal. N. Y., vol. 4, Ham. Gr. [Sig. a very small crumb.]
- obsolescens*, Hall, 1867, Pal. N. Y., vol. 4, Devonian. [Sig. obsolete.]
- papilionensis*, Hall, 1858, (*Pentamerus papilionensis*) Geo. Rep. Iowa, vol. 1, pt. 2, Ham. Gr. [Ety. proper name.]
- PENTAMERUS, Sowerby, 1814, Min. Conch., vol. 1. [Ety. *penta*, five; *meros*, apartments.]
- aratus*, see *Pentamerella arata*.
- arcuosus*, McChesney, 1861, New Pal. Foss., Niagara Gr. [Sig. arched, bent over.]
- barrandi*, Billings, 1857, Rep. of Progr., Mid. Sil. [Ety. proper name.]
- bisinuatus*, McChesney, 1861, New Pal. Foss., Niagara Gr. [Sig. having two depressions.]
- borealis*, Meek, 1868, Trans. Chi. Acad. Sci., Ham. Gr. [Sig. northern.] This name was preoccupied by Eichwald in 1840.
- brevirostris*, Sowerby, 1839, (*Terebratula brevisrostris*) Murch. Sil. Syst., Niagara Gr. [Sig. short-beaked.]
- chicagoensis*, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Ety. proper name.]
- comis*, Owen, 1852, (*Atrypa comis*) Geo. Sur. Wis., Iowa and Minn., Ham. Gr. [Sig. nice, delicate.]
- crassiradiatus*, McChesney, 1861, New Pal. Foss., Niagara Gr. [Sig. thick-rayed.]
- elongatus*, see *Amphigenia elongata*.
- fornicatus*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. arched or vaulted over.]



- galeatiformis*, Meek & Worthen, syn. for *P. galeatus*.
- galeatus*, Dalman, 1827, (*Atrypa galeatus*) Vet. Acad. Handl., Low. Held. Gr. [Sig. helmet-shaped.]
- intralineatus*, Winchell, 1866, Rep. Low. Penin. Mich., Ham. Gr. [Sig. marked with lines on the inside.]
- knappi*, Hall, 1872, 24th Reg. Rep., Niagara Gr. [Ety. proper name.]
- knighti*, Sowerby, 1812, Min. Conch., vol. 1, Devonian. [Ety. proper name.]
- littoni*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. & Niagara Gr. [Ety. proper name.]
- multicostatus*, Hall, 1861, Rep. of Progr. Wis. Sur., Niagara Gr. [Sig. many-ribbed.]
- nucleus*, Hall, 1872, 24th Reg. Rep., Clinton Gr. [Sig. a kernel.]
- nysius*, Hall, 1872, 24th Reg. Rep., Niagara Gr. [Ety. mythological name.] There are two varieties, one having coarse and the other finer radii. These are designated *P. nysius* var. *crassicosus* and *P. nysius* var. *tenuicosus*.
- oblongus*, Sowerby, 1839, Murch. Sil. Syst., Clinton & Niagara Gr. [Sig. longer than broad.]
- oblongus* var. *cylindricus*, Hall, 1872, 24th Reg. Rep., Niagara Gr. [Sig. cylindrical.]
- occidentalis*, Hall, 1852, Pal. N. Y., vol. 2, Guelph Gr. [Sig. western.]
- occidentalis*, Hall, 1858, Geo. Rep. Iowa, Ham. Gr. This name was preoccupied. The species is now referred to the genus *Gypidula*, by the author.
- ovalis*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. egg-shaped.]
- papilionensis*, see *Pentamerella papilionensis*.
- pergibbosus*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Sig. very gibbous.]
- pseudogaleatus*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. false *galeatus*.]
- reversus*, see *Anastrophia reversa*.
- salinensis*, Swallow, 1860, Trans. St. Louis Acad. Sci., Devonian. [Ety. proper name.]
- similior*, Winchell & Marcy, 1865, (*Spirifera similior*) Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Ety. from its resemblance to *Spirifera bicostata*.]
- subglobosus*, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Ham. Gr. [Sig. somewhat globose.]
- trisinuatus*, McChesney, 1861, Desc. New Pal. Foss., Niagara Gr. [Sig. marked with three depressions.]
- ventricosus*, Hall, 1861, Rep. Progr. Wis. Sur., Niagara Gr. [Sig. bulging out.]
- verneuili*, see *Anastrophia verneuili*.
- PHOLIDORS**, Hall, 1859, Pal. N. Y., vol. 3, [Ety. *pholis*, *pholidos*, a scale.]
- arenaria*, Hall, 1867, Pal. N. Y., vol. 4, Oriskany sandstone. [Sig. sandy.]
- areolata*, Hall, 1863, 16th Reg. Rep., Schoharie grit. [Sig. divided into irregular squares or angular spaces.]
- cincinnatiensis*, Hall, 1872, Pamphlet, Cin'ti Gr. [Ety. proper name.]
- hamiltoniæ*, Hall, 1860, 13th Reg. Rep. N. Y., Ham. Gr. [Ety. proper name.]
- linguloides*, Hall, 1867, Pal. N. Y., vol. 4, Ham. Gr. [Sig. like a *Lingula*.]
- oblata*, Hall, 1867, Pal. N. Y., vol. 4, Ham. Gr. [Sig. oblate.]
- ovalis*, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. oval.]
- ovata*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. egg-shaped.]
- squamiformis*, Hall, 1843, (*Orbicula squamiformis*) Geo. Rep. 4th Dist. N. Y., Niagara Gr. [Sig. in the form of a scale.]
- subtruncata*, Hall, 1847, (*Orbicula subtruncata*) Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. somewhat shortened.]
- terminalis*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. terminating.]
- trentonensis*, Hall, 1866, Pamphlet, Trenton Gr. [Ety. proper name.]
- Platystrophia*, syn. for *Orthis*.
- regularis*, syn. for *Orthis lynx*.
- Plectambonites arca*, syn. for *Leptaena transversalis*.
- glabra*, syn. for *Leptaena sericea*.
- tenera*, syn. for *Leptaena transversalis*.
- Plicatula*, Lamarck, 1809.
- striatocostata*, see *Meekella striatocostata*.
- PORAMBONITES**, Pander, 1830, Beitrage zur Geog. des Russischen Reiches. [Ety. *poros*, opening; *ambon*, umbone.]
- dentatus*, see *Orthis dentata*.
- ottawaensis*, Billings, 1862, Pal. Foss., vol. 1, Black Riv. Gr. [Ety. proper name.]
- PRODUCTELLA**, Hall, 1867, Pal. N. Y., vol. 4, [Sig. diminutive of *Productus*.]
- arctirostrata*, Hall, 1857, (*Productus arctirostratus*) 10th Reg. Rep., Chemung Gr. [Sig. narrow-beaked.]
- bialveata*, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Sig. double-channelled.]
- boydi*, Hall, 1857, (*Productus boydii*) 10th Reg. Rep., Chemung Gr. [Ety. proper name.]
- concentrica*, Hall, 1857, (*Productus concentricus*) 10th Reg. Rep., Kinderhook Gr. [Sig. concentrically lined.]
- costatula*, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Sig. small-ribbed.]
- costatula* var. *strigata*, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Sig. furrowed.]
- dumosa*, Hall, 1861, (*Productus dumosus*) 14th Reg. Rep., Ham. Gr. [Sig. bushy.]
- erieniensis*, Nicholson, 1874, Geo. Mag., n. s., vol. 1, Cornif. Gr. [Ety. proper name.]

- exanthemata, Hall, 1857, (*Productus exanthematus*) 10th Reg. Rep., Ham. Gr. [Sig. covered with eruptions.]
- hirsuta, Hall, 1857, (*Productus hirsutus*) 10th Reg. Rep., Chemung Gr. [Sig. rough, hairy.]
- hirsuta *var.* rectispina, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Sig. straight-spined.]
- hystriacula, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Sig. somewhat covered with spines.]
- lachrymosa, Conrad, 1842, (*Strophomena lachrymosa*) Jour. Acad. Nat. Sci., vol. 8, Chemung Gr. [Sig. full of tears.]
- lachrymosa *var.* lima, Conrad, 1842, (*Strophomena lima*) Jour. Acad. Nat. Sci., vol. 8, Chemung Gr. [Sig. crooked or rough.]
- laychrymosa *var.* stigmata, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Sig. marked, branded.]
- navicella, Hall, 1857, (*Productus navicella*) 10th Reg. Rep., Cornif. & Ham. Gr. [Sig. a small boat.]
- newberryi, Hall, 1857, (*Productus newberryi*) 10th Reg. Rep., Chemung Gr. [Ety. proper name.]
- onusta, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Sig. filled.]
- papulata, Hall, 1867, Pal. N. Y., vol. 4, Ham. Gr. [Sig. pimpled.]
- pyxidata, Hall, 1858, (*Productus pyxidatus*) Geo. of Iowa, Ham. Gr. [Sig. made like a box.]
- rarispinga, Hall, 1857, (*Productus rarispingus*) 10th Reg. Rep., Chemung Gr. [Sig. having few spines.]
- shumardiana, Hall, 1858, (*Productus shumardianus*) Geo. Rep. of Iowa, vol. 1, pt. 2, Cornif. Gr., Marcellus shale, Ham. Gr., Burlington and Tully limestone. [Ety. proper name.]
- speciosa, Hall, 1857, (*Productus speciosus*) 10th Reg. Rep., Chemung Gr. [Sig. beautiful.]
- spinulicosta, Hall, 1857, (*Productus spinulicostus*) 10th Reg. Rep., Marcellus shales & Ham. Gr. [Sig. spined and ribbed.]
- striatula, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Sig. somewhat striated.]
- subaculeata, Murchison, 1840, (*Productus subaculeatus*) Bul. Soc. Geo. de France, vol. 5, Cornif. Gr. [Sig. somewhat prickly.]
- subalata, Hall, 1857, (*Productus subalatus*) 10th Reg. Rep., Ham. Gr. [Sig. somewhat winged.]
- truncata, Hall, 1857, (*Productus truncatus*) 10th Reg. Rep., Marcellus shales & Ham. Gr. [Sig. cut short.]
- tullia, Hall, 1867, Pal. N. Y., vol. 4, Ham. Gr. [Ety. proper name.]
- Productus*, Sowerby, 1814, Min. Conch., vol. 1. [Ety. *productus*, produced—so named from one valve of the shell being prolonged beyond the other, and often to a great extent.]
- aequicostatus, Shumard, 1855, Geo. Rep. Mo., Coal Meas. [Sig. equal-ribbed.]
- alternatus, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., 2d series, vol. 3, Keokuk Gr. [Sig. alternating.]
- altonensis, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., 2d series, vol. 3, Chester Gr. [Ety. proper name.]
- americanus, Swallow, 1863, Trans. St. Louis Acad. Sci., Up. Coal Meas. [Ety. proper name.]
- arctirostratus, see *Productella arctirostrata*.
- arcuatus, Hall, 1858, Geo. Rep. Iowa, Kinderhook Gr. [Sig. arched, bent over.]
- asper, McChesney, syn. for *P. nebrascensis*.
- auriculatus, Swallow, 1863, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. having ear-like appendages.]
- biseriatus, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. in double rows or series.]
- boonensis, Swallow, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]
- boydi, see *Productella boydi*.
- calhounianus, Swallow, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.] Prof. Meek regarded this name as a synonym for *P. semireticulatus*.
- callawayensis, Swallow, 1860, Trans. St. Louis Acad. Sci., Low. Devonian. [Ety. proper name.]
- cancrini, as identified by Geinitz, is *P. pertenuis* of Meek.
- capaci, d'Orbigny, 1843, as identified by early authors, is referred to *P. longispinus*.
- cestriensis, Worthen, 1860, Trans. St. Louis Acad. Sci., Chester Gr. [Ety. proper name.]
- clavus, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., 2nd series, vol. 3, Coal Meas. [Sig. club-shaped.]
- comoides, as identified by d'Archiac & Veneuil. Not American.
- concentricus, see *Productella concentrica*.
- confragosus, Harlan, 1835, Trans. Geo. Soc. Penn., Carb. [Sig. rough, uneven.]
- cooperensis, Swallow, 1860, Trans. St. Louis Acad. Sci., Chemung Gr. [Ety. proper name.]
- cora, d'Orbigny, 1842, Geol. Voy. Amer., Coal Meas. [Ety. mythological name.]
- cora *var.* mogoyoni, Marcou, 1858, Geo. N. Amer., Low. Carb. [Ety. proper name.]
- coriformis, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. like *Productus cora*.]

- costatoides, Swallow, 1858, Trans. St. Louis Acad. Sci., Up. Coal Meas. [Sig. resembling *P. costatus*.]
- costatus, Sowerby, 1827, Min. Conch. vol. 6, Coal Meas. [Sig. ribbed.] It is doubtful whether this species has been identified in America.]
- curtirostratus, Winchell, 1865, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. short-beaked.]
- delawari, Marcou, 1858, Geol. N. Amer., Low. Carb. [Ety. proper name.]
- depressus, Sowerby, 1825, see *Strophomena depressa*.
- depressus, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. depressed.]
- dissimilis, Hall, 1858, Geo. of Iowa, Ham. Gr. [Sig. unlike, various.]
- dolorosus, Winchell, 1865, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. wretched.]
- dumosus, see *Productella dumosa*.
- duplicostatus, Winchell, 1865, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. double-plicated.]
- elegans, Norwood & Pratten, 1854. This name was preoccupied, and the fossil is now named *P. cestriensis*.
- exanthematus, see *Productella exanthemata*.
- fasciculatus, McChesney, 1860, New Pal. Foss., Coal Meas. [Sig. bundled.]
- fentonensis, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Ety. proper name.]
- flemingi, Sowerby, 1814, Min. Conch., vol. 1, Low. Carb. [Ety. proper name.]
- flemingi var. burlingtonensis, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Ety. proper name.]
- gracilis, Winchell, 1865, Proc. Acad. Nat. Sci., Cuyahoga shale. [Sig. slender.]
- gradatus, Swallow, 1863, Trans. St. Louis Acad. Sci., Keokuk Gr. [Sig. made with steps.]
- hildrethianus, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., 2nd ser., vol. 3, Coal Meas. [Ety. proper name.]
- hirsutus, see *Productella hirsuta*.
- horridus, Geinitz, 1866. This name was preoccupied; moreover Prof. Meek regarded the fossil as *P. longispinus*.
- indianensis, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]
- inflatus, syn. for *P. semireticulatus*.
- ivesi, Newberry, 1861, Ives' Col. Ex. Exped., Mid. Carb. [Ety. proper name.]
- lasallensis, Worthen, 1873, Geo. Sur. Ill., vol. 5, Up. Coal Meas. [Ety. proper name.]
- laevicostus, White, 1860, Bost. Jour. Nat. Hist., Kinderhook Gr. [Sig. smooth-ribbed.]
- latissimus, Sowerby, 1822, Min. Conch., Carb. [Sig. very wide.]
- longispinus, Sowerby, 1814, Min. Conch., vol. 1, Coal Meas. [Sig. long-spined.]
- lobatus, as identified by d'Archiac & Verneuil. Not American.
- magnicostatus, Swallow, 1860, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. large-ribbed.]
- magnus, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. large.]
- marginicinctus, Prout, 1857, Trans. St. Louis Acad. Sci., St. Louis Gr. [Sig. encircled with a depression near the margin.]
- mesialis, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. middle-parted.]
- mexicanus, Shumard, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- morbilianus, Winchell, 1865, Proc. Acad. Nat. Sci., Burlington Gr. [Sig. measly, spotted.]
- multistriatus, Meek, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. many-lined.]
- muricatus, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci. Phil., Coal Meas. Prof. Meek regarded this as a syn. for *P. longispinus*. [Sig. full of sharp points.]
- navicella, see *Productella navicella*.
- nebrascensis, Owen, 1852, Geo. Rep. Wis., Iowa & Minn., Coal Meas. [Ety. proper name.]
- nodosus, Newberry, 1861, Ives' Col. Ex. Exped. Carb. [Sig. knotty.]
- norwoodi, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- occidentalis, Newberry, 1861, Ives' Col. Ex. Exped., Up. Carb. [Sig. western.]
- orbignyanus, Geinitz, 1866. This name was preoccupied by Sowerby in 1822.
- ovatus, Hall, 1858, Geo. Rep. Iowa, St. Louis Gr. [Sig. egg-shaped.]
- parvulus, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. very small.]
- parvus, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Chester Gr. [Sig. small.]
- pertenuis, Meek, 1872, Pal. E. Neb., Coal Meas. [Sig. very thin.]
- phillipsi, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., vol. 3, 2nd series, Low. Carb. [Ety. proper name.]
- piliformis, syn. for *Productus cora*.
- pileolus, Shumard, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. a little bonnet or cap.]
- popii, Shumard, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- portlockianus, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., 2nd series, vol. 3, Coal Meas. [Ety. proper name.]

- prattenianus, Norwood, 1854, Jour. Acad. Nat. Sci. Phil., 2d series, vol. 3, Coal Meas. [Ety. proper name.]  
 punctatus, Martin, 1809, Petrif. Derb., Low. Carb. and Coal Meas. [Sig. covered with points, dotted.]  
*pyxidatus* see *Productella pyxidata*.  
*rarispinus*, see *Productella rarispinata*.  
 rogersi, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., Coal Meas. [Ety. proper name.] Prof. Meek regarded this as a synonym for *P. nebrascensis*.  
 scabriculus, (*Conchylolithus Anomites scabriculus*) Martin, 1809, Petrif. Derb., Carb. [Sig. rough.]  
 scitulus, Meek & Worthen, 1860, Proc. Acad. Nat. Sci., St. Louis Gr. [Sig. neat, pretty.]  
*semipunctatus*, Hildreth, 1838, syn. for *P. punctatus*.  
 semireticulatus, Martin, 1809, (*Conchylolithus Anomites semireticulatus*) Petrif. Derb., Keokuk Gr. [Sig. half-like a net or lattice work.]  
*semistriatus*, Meek, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. half-striated.]  
 setigerus, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. bearing bristles on the back.]  
*setigerus var. keokuk*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Ety. proper name.]  
*shumardianus*, see *Productella shumardiana*.  
*speciosus*, see *Productella speciosa*.  
*spinulicostus*, see *Productella spinulicosta*.  
 spinulosus, Sowerby, 1814, Min. Conch., vol. 1, Carb. [Sig. full of spines.]  
 splendens, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci. Phil., vol. 3, Coal Meas. [Sig. splendid.] Prof. Meek regarded this as a synonym for *P. longispinus*.  
*subaculeatus*, see *Productella subaculeata*.  
*subalatus*, see *Productella subalata*.  
 symmetricus, McChesney, 1860, Desc. New Pal. Foss., Coal Meas. [Sig. symmetrical.]  
 tenuicostus, Hall, 1858, Geo. Rep. Iowa, St. Louis Gr. [Sig. slender-ribbed.]  
 tenuistriatus, Verneuil, 1845, Geol. Russia & Ural Mountains, Carb. [Sig. fine-lined.]  
*truncatus*, see *Productella truncata*.  
*tubulospinus*, McChesney. Syn. for *P. punctatus*.  
 viminalis, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. bearing twigs.]  
 vittatus, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. bound in a fillet or hair-lace.]  
*wabashensis*, Norwood & Pratten, syn. for *P. longispinus*.  
*wilberianus*, McChesney, syn. for *P. nebrascensis*.  
 wortheni, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Ety. proper name.]
- PSEUDOCRANIA, McCoy, 1851, Ann. & Mag. Nat. Hist., 2d series, vol. 8. [Ety. *pseudo*, false; *Crania*, a genus of shells.  
*anomala*, Winchell, 1866, Rep. Low. Pen. Mich., Ham. Gr. [Sig. irregular.]  
 RENSSSELERIA, Hall, 1859, Pal. N. Y., vol. 3. [Ety. proper name.]  
*æquiradiata*, Conrad, 1842, (*Atrypa æquiradiata*) Jour. Acad. Nat. Sci., vol. 8, Low. Held. Gr. [Sig. equal-rayed.]  
 conradi, McChesney, 1861, New Pal. Foss., Oriskany sandstone. [Ety. proper name.]  
 cumberlandiæ, Hall, 1857, (*Meganteris cumberlandiæ*) 10th Reg. Rep., Oriskany sandstone. [Ety. proper name.]  
 elliptica, Hall, 1857, (*Meganteris elliptica*) 10th Reg. Rep., Low. Held. Gr. [Sig. elliptical.]  
*elongata*, see *Amphigenia elongata*.  
 intermedia, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. intermediate.]  
 johanni, Hall, 1867, Pal. N. Y., vol. 4, Up. Held. Gr. [Ety. proper name.]  
 lævis, Hall, 1857, (*Meganteris lævis*) 10th Reg. Rep., Low. Held. Gr. [Sig. smooth.]  
*lævis*, Meek, 1868. This name was pre-occupied.  
 marylandica, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Ety. proper name.]  
 mutabilis, Hall, 1857, (*Meganteris mutabilis*) 10th Reg. Rep., Low. Held. Gr. [Sig. changing, variable.]  
 ovalis, Hall, 1857, (*Meganteris ovalis*) 10th Reg. Rep., Oriskany sandstone. [Sig. oval.]  
 ovoides, Eaton, 1832, (*Terebratula ovoides*) Geo. Text-book, Oriskany sandstone. [Sig. ovoid.]  
 suessiana, Hall, 1857, (*Meganteris suessiana*) 10th Reg. Rep., Oriskany sandstone. [Ety. proper name.]  
 RETZIA, King, 1850, Monograph of Permian Foss. [Ety. proper name.]  
 altirostris, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Chemung Gr. [Sig. high-beaked.]  
 compressa, Meek, 1864, Pal. California, Coal Meas. [Sig. compressed.]  
 eugenia, Billings, 1861, Can. Jour., Ham. Gr. [Ety. proper name.]  
 marcyi, Shumard, 1854, (*Terebratula marcyi*) Marcy's Exp. Red Riv., Coal Meas. [Ety. proper name.]  
 meekiana, Shumard, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]  
 mormoni, Marcou, 1858, (*Terebratula mormoni*) Geo. N. Amer., Coal Meas. [Ety. proper name.] This species was subsequently, though in the same year, described by Shumard under the name *R. punctilifera*.

- osagensis, Swallow, 1860, Trans. St. Louis Acad. Sci., Chemung Gr. [Ety. proper name.]
- papillata, Shumard, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. pimpled.]
- popiana, Swallow, 1860, Trans. St. Louis Acad. Sci., Chemung Gr. [Ety. proper name.]
- punctilifera, Shumard, 1858, syn. for *Retzia mormoni*.
- polypleura, Winchell, 1862, Proc. Acad. Nat. Sci., Portage Gr. [Sig. many-sided.]
- subglobosa, McChesney, syn. for *Retzia mormoni*.
- vera, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Sig. true, natural.]
- vera var. costata, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Sig. ribbed.]
- verneuilliana, Hall, 1856, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]
- RHYNCHONELLA**, Fischer, 1809, Mem. Soc. Imp. Mosc. [Ety. *rhynchos*, a beak; *ella*, little.]
- abrupta, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. terminating abruptly.]
- acadiensis, Davidson, 1863, Quar. Jour. Geo. Soc., vol. 19, Low. Carb. [Ety. proper name.]
- acinus, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. a cherry stone.]
- acutiplicata, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. having plications acutely angular.]
- acutirostris, Hall, 1847, (*Atrypa acutirostra*) Pal. N. Y., vol. 1, Chazy Gr. [Sig. sharp-beaked.]
- aequivalvis, Hall, 1857, 10th Reg. Rep., Low. Held. Gr. [Sig. equal-valved.]
- aequiradiata, Hall, 1852, (*Atrypa aequiradiata*) Pal. N. Y., vol. 2, Clinton Gr. [Sig. equal-rayed.]
- algeri, McChesney, 1860, New Pal. Foss., Carb. [Ety. proper name.]
- altilis, Hall, 1847, (*Atrypa altilis*) Pal. N. Y., vol. 1, Chazy Gr. [Sig. fat, fed.]
- altiplicata, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. high plications.]
- alveata, see *Centronella alveata*.
- angulata, Linnaeus, as identified by Geinitz, syn. for *Syntrochasma hemiplatum*.
- anticostiensis, Billings, 1862, Pal. Foss., vol. 1, Hud. Riv. Gr. [Ety. proper name.]
- aprinis, DeVerneuil, 1845, (*Terebratula aprinis*) Geo. Russia & Ural Mts., Niagara Gr. [Sig. like a pig's head (?).]
- arctirostrata, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. narrow-beaked.]
- argentea, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. glittering.]
- argenturbica, White, 1874, Rep. Invert. Foss., Cin'ti Gr. [Sig. from Silver City.]
- barquensis, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. proper name.]
- barrandi, Hall, 1857, 10th Reg. Rep., Oriskany sandstone. [Ety. proper name.]
- bialveata, Hall, 1859, Pal. N. Y., vol. 3, Lower Held. Gr. [Sig. double-channelled.]
- bidens, Hall, 1852, (*Atrypa bidens*) Pal. N. Y., vol. 2, Clinton Gr. [Sig. having two teeth.]
- bidentata, Hisinger, 1826, (*Terebratula bidentata*) Vet. Acad. Handl., Niagara Gr. [Sig. having two teeth.]
- billingsi, see *Stenoschisma billingsi*.
- boonensis, Shumard, 1855, Geo. Rep. Mo., Trenton Gr. [Ety. proper name.]
- brevirostris, Sowerby, 1839, (*Terebratula brevirostris*) Murch. Sil. Syst., Niagara Gr. [Sig. short-beaked.] This species is probably *Pentamerus brevirostris*.
- campbelliana, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- camerifera, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. chambered.]
- capax, Conrad, 1842, (*Atrypa capax*) Jour. Acad. Nat. Sci., vol. 8, Hud. Riv. Gr. [Sig. large, capacious.]
- caput-testudinis, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. like a turtle's head.]
- carica, see *Stenoschisma carica*.
- carbonaria, McChesney, 1860, New Pal. Foss., Coal Meas. [Sig. from the Coal Measures.]
- carolina, see *Stenoschisma carolina*.
- castanea, Meek, 1868, Trans. Chi. Acad. Sci., Devonian. [Sig. a chestnut.]
- congregata, see *Stenoschisma congregatum*.
- contracta, see *Stenoschisma contractum*.
- cooperensis, Shumard, 1855, Geo. Rep. Mo., Chem. Gr. [Ety. proper name.]
- corinthia, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. corinthian.]
- cuboides, Sowerby, (*Atrypa cuboides*) see *R. venustula*.
- cuneata, Dalman, 1827, (*Terebratula cuneata*) Vet. Acad. Handl., Niagara Gr. [Sig. wedge-shaped.]
- dawsoniana, Davidson, 1863, Quar. Jour. Geo. Soc., vol. 19, Low. Carb. [Ety. proper name.]
- dentata, Hall, 1847, (*Atrypa dentata*) Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. having teeth.]
- dotis, see *Stenoschisma dotis*.
- dryope, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Ety. mythological name.]
- dubia, Hall, 1847, (*Atrypa dubia*) Pal. N. Y., vol. 1, Chazy Gr. [Sig. doubtful.]
- duplicata, syn. for *Stenoschisma contractum*.

- eatoniiiformis*, McChesney, 1860, New Pal. Foss., Carb. [Ety. from a resemblance to *Eatonia*.]  
*emacerata*, Hall, 1852, (*Atrypa emacerata*) Pal. N. Y., vol. 2, Clinton Gr. [Sig. made lean.]  
*eminens*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. eminent, remarkable.]  
*endlichi*, Meek, 1876, U. S. Geo. Sur. of Colorado, Up. Devonian. [Ety. proper name.]  
*eua*, Billings, 1866, Catal. Sil. Foss., Antic., Anticosti Gr. [Ety. proper name.]  
*evangelina*, Hartt, 1868, Acad. Geol., Low. Carb. [Ety. proper name.]  
*excellens*, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Sig. excellent.]  
*eximia*, see *Stenoschisma eximium*.  
*explanata*, McChesney, 1860, Desc. New Pal. Foss., Chester Gr. [Sig. made plane or smooth.]  
*fitchiana*, Hall, 1857, 10th Reg. Rep., Oriskany sandstone. [Ety. proper name.]  
*formosa*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. beautiful.]  
*fringilla*, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Sig. a small bird.]  
*glacialis*, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Sig. icy.]  
*glansfagea*, see *Centronella glansfagea*.  
*grosveneri*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]  
*guadalupæ*, Shumard, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]  
*heteropsis*, Winchell, 1865, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. of irregular appearance.]  
*horsfordi*, see *Stenoschisma horsfordi*.  
*hubbardi*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. proper name.]  
*huronensis*, Winchell, 1862, Proc. Acad. Nat. Sci., Portage Gr. [Ety. proper name.]  
*ida*, Hartt, 1868, Acad. Geol., Low. Carb. [Ety. proper name.]  
*increbescens*, syn. for *Rhynchonella capax*.  
*indentata*, Shumard, 1859, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. indented.]  
*indianensis*, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Ety. proper name.]  
*inæquiplicata*, Hall, 1857, 10th Reg. Rep., Up. Held. Gr. [Sig. unequally plicated.]  
*interplicata*, Sowerby, 1839, (*Terebratula interplicata*) Murch. Sil. Syst., Niagara Gr. [Sig. interplated.]  
*inutilis*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. insignificant.]  
*janea*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Ety. mythological name.]  
*lacunosa*. Not an American species.  
*lamellata*, Hall, 1852, (*Atrypa lamellata*) Pal. N. Y., vol. 2, Coralline limestone. [Sig. having thin plates.]  
*lawra*, Billings, syn. for *Leiorhynchus multicoctus*.  
*macra*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. long.]  
*marshallensis*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. proper name.]  
*metallica*, White, 1874, Rep. Invert. Foss., Carb. [Sig. metallic.]  
*mica*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. a little crumb.]  
*micropleura*, Winchell, 1865, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. small-ribbed.]  
*missouriensis*, Shumard, 1855, Geo. of Mo., Chemung Gr. [Ety. proper name.]  
*multistriata*, Hall, 1857, 10th Reg. Rep., Oriskany sandstone. [Sig. many-striated.]  
*mutabilis*, Hall, 1857, 10th Reg. Rep., Low. Held. Gr. [Sig. variable.]  
*mutata*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. changing.]  
*neglecta*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. overlooked.]  
*neglecta var. scobina*, Meek, 1872, Am. Jour. Sci. & Arts, 3rd series, vol. 4, Clinton Gr. [Sig. a file.]  
*nobilis*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. notable.]  
*nucleolata*, Hall, 1857, 10th Reg. Rep., Low. Held. Gr. [Sig. like a small nut.]  
*nutrix*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. the breast, the pap.]  
*oblata*, Hall, 1857, 10th Reg. Rep., Oriskany sandstone. [Sig. oblate, broader than long.]  
*obsolescens*, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. old, obsolete.]  
*obtusiplicata*, Hall, 1852, (*Atrypa obtusiplicata*) Pal. N. Y., vol. 2, Niagara Gr. [Sig. having obtuse plications.]  
*orbicularis*, see *Stenoschisma orbiculare*.  
*orientalis*, Billings, 1859, Can. Nat. Geo., vol. 4, Chazy Gr. [Sig. eastern, in the eastern provinces.]  
*osagensis*, Swallow, 1858, syn. for *Rhynchonella uta*.  
*ottumwa*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, St. Louis Gr. [Ety. proper name.]  
*parvini*, McChesney, syn. for *Camero-phoria subtrigona*.  
*perrostellata*, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. having a very little beak.]  
*persinuata*, Winchell, 1865, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. very sinuate.]  
*pisum*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Sig. a pea.]

- planoconvexa*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. *planus*, level; *convexus*, convex.]  
*pleiopleura*, Conrad, 1841, (*Atrypa pleio-pleura*) Ann. Rep. N. Y., Oriskany sandstone. [Sig. wide-ribbed.]  
*plena*, Hall, 1847, (*Atrypa plena*) Pal. N. Y., vol. 1, Chazy Gr. [Sig. full, large.]  
*plicata*, Hall, 1852, (*Atrypa plicata*) Pal. N. Y., vol. 2, Medina Gr. [Sig. plaited, folded.]  
*plicatella*, Hall, 1852, (*Atrypa plicatella*) Pal. N. Y., vol. 2, Niagara Gr. [Sig. having small plications.]  
*plicatula*, Hall, 1843, (*Atrypa plicatula*) Geo. Rep. 4th Dist. N. Y., Clinton Gr. [Sig. having little plications.]  
*plicifera*, Hall, 1847, (*Atrypa plicifera*) Pal. N. Y., vol. 1, Chazy Gr. [Sig. bearing plications.]  
*principalis*, Hall, 1857, 10th Reg. Rep., Oriskany sandstone. [Sig. principal, chief.]  
*prolifera*, see *Stenoschisma prolificum*.  
*pugnus*, Martin, 1809, Petrif. Derb., Low. Carb. [Sig. the fist.]  
*pustulosa*, White, 1860, Bost. Jour. Nat. Hist., vol. 7, Burlington Gr. [Sig. pustulose.]  
*pyramidata*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. made like a pyramid.]  
*pyrrha*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Ety. mythological name.]  
*quadriricostata*, Hall, 1843, (*Atrypa quadriricostata*) Geo. Rep. 4th Dist. N. Y., Genesee slate. [Sig. four-ribbed.]  
*quadriricostata*, Hall, 1852, (*Atrypa quadriricostata*) Pal. N. Y., vol. 2, Clinton Gr. This name was preoccupied.  
*ramsayi*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Ety. proper name.]  
*recurvirostra*, Hall, 1847, (*Atrypa recurvirostra*) Pal. N. Y., vol. 1, Black Riv. to Hud. Riv. Gr. [Sig. bent-beaked.]  
*reticulata*, see *Eichwaldia reticulata*.  
*ricinula*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. a little tick.]  
*ringens*, Swallow, 1860, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. gaping, having an open orifice.]  
*robusta*, Hall, 1852, Pal. N. Y., vol. 2, (*Atrypa robusta*) Clinton Gr. [Sig. robust.]  
*royana*, see *Stenoschisma royanum*.  
*ridleyana*, Safford, 1869, Geo. of Tenn. Not defined.  
*rudis*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. rude, not fashioned.]  
*rugosa*, Hall, 1852, (*Atrypa rugosa*) Pal. N. Y., vol. 2, Niagara Gr. [Sig. wrinkled.]  
*saffordi*, Hall, 1860, Can. Nat. & Geo., vol. 5, Low. Held. Gr. [Ety. proper name.]  
*sageriana*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. proper name.]  
*sappho*, see *Stenoschisma sappho*.  
*semiplicata*, Conrad, 1841, (*Atrypa semiplicata*) Ann. Rep. N. Y., Low. Held. Gr. [Sig. half-folded.]  
*septata*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. divided by septa or partitions.]  
*sinuata*, Hall, 1860, Can. Nat. & Geo., vol. 5, Up. Sil. [Sig. wavy.]  
*sordida*, Hall, 1847, (*Atrypa sordida*) Pal. N. Y., vol. 1, Trenton Gr. [Sig. despicable, paltry.]  
*speciosa*, Hall, 1857, 10th Reg. Rep., Oriskany sandstone. [Sig. beautiful.]  
*stephani*, see *Stenoschisma stephani*.  
*subcircularis*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. somewhat circular.]  
*subcuboides*. Not an American species.  
*subcuneata*, Hall, 1856, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. somewhat wedge-shaped.]  
*subtrigona*, see *Camerophoria subtrigona*.  
*subtrigonalis*, Hall, 1847, (*Atrypa subtrigonalis*) Pal. N. Y., vol. 1, Trenton Gr. [Sig. somewhat triangular.]  
*sulcopicata*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. grooved along the center of the plications.]  
*tennesseensis*, Roemer, 1860, Sil. Fauna West Tenn., Niagara Gr. [Ety. proper name.]  
*tethys*, see *Stenoschisma tethys*.  
*tetrptyx*, Winchell, 1865, Proc. Acad. Nat. Sci., Kinderhook Gr. [Sig. having four-folds.]  
*texiana*, Shumard, 1859, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]  
*thalia*, see *Stenoschisma billingsi*.  
*transversa*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. wider than long.]  
*unica*, Winchell, 1865, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. single, alone.]  
*unisulcata*, see *Meristella unisulcata*.  
*uta*, Marcou, 1858, (*Terebratula uta*) Geo. N. Amer., Coal Meas. [Ety. proper name.] This was subsequently described by Swallow as *R. osagensis*.  
*vellicata*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. pinched.]  
*ventricosa*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. bulging out, bellying.]  
*venustula*, Hall, 1867, Pal. N. Y., vol. 4, Tully limestone. This was identified by Vanuxem, 1842, Geo. 3rd Dist. N. Y., as *Atrypa cuboides* of Sowerby. [Sig. somewhat fair, handsome or pretty.]  
*vicina*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. neighboring, near to.]



- warrenensis, Swallow, 1860, Trans. St. Louis Acad. Sci., Low. Devonian. [Ety. proper name.]
- wasatchensis, White, 1874, Rep. Invert. Foss., Carb. [Ety. proper name.]
- whitii, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. proper name.]
- whitii, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Ety. proper name.] This name was preoccupied.
- wilsoni, Sowerby, 1818, (Terebratula wilsoni) Min. Conch., vol. 2, Niagara Gr. [Ety. proper name.]
- wortheni, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]
- RHYNCHOSPIRA, Hall, 1859, Pal. N. Y., vol. 3, [Ety. *rhynchos*, a beak; *spira*, a spire.]
- deweyi, Hall, 1856, (Waldheimia deweyi) 9th Reg. Rep., Low. Held. Gr. [Ety. proper name.]
- evax, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. a word of joy, a hurra.]
- formosa, Hall, 1856, (Waldheimia formosa) 9th Reg. Rep., Low. Held. Gr. [Sig. beautiful.]
- lepida, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. pretty.]
- nobilis*, see Trematospira nobilis.
- rectirostra*, see Trematospira rectirostra.
- subglobosa, Hall, 1867, Pal. N. Y., vol. 4, Schoharie grit. [Sig. somewhat globular.]
- sinuata, Dawson, 1868, Acad. Geol., Up. Sil. [Sig. waved.]
- Rhynobolus*, Hall, 1871, syn. for Trimerella.
- galtensis*, Hall, see Trimerella galtensis.
- SCHIZOCRANIA, Hall & Whitfield, 1875, Ohio Pal., vol. 2, [Ety. *schiza*, a cleft; *Crania*, a genus of fossil brachiopods.]
- filosa, Hall, 1847, (Orbicula (?) filosa) Pal. N. Y., vol. 1, Cin'ti and Utica Gr. [Sig. thread-like, thready.]
- SKENIDIUM, Hall, 1860, 13th Reg. Rep. [Ety. a little tent.]
- halli*, Safford, 1869, Geo. of Tenn. Not defined.
- insignis, Hall, 1859, (Orthis insignis) Pal. N. Y., vol. 3, Low. Sil. [Sig. distinguished.]
- pyramidalis, Hall, 1852, (Orthis pyramidalis) Pal. N. Y., vol. 2, Niagara Gr. [Sig. pyramidal.]
- SPIRIFERA, Sowerby, 1815, Min. Conch., vol. 2, [Ety. *spira*, a spire; *fero*, to bear.]
- acanthoptera Conrad, 1842, (Delthyris acanthoptera) Jour. Acad. Nat. Sci., vol. 8, Chemung Gr. [Ety. *akantha*, a spine; *pteron*, a wing.]
- acuminata, Conrad, 1839, (Delthyris acuminata) Ann. Rep. N. Y., Cornif. and Ham. Gr. [Sig. sharp-pointed.]
- acuticostata, DeKoninck, 1843, Desc. An. Foss. Terr. Carb. Belg., Low. Carb. [Sig. sharp-ribbed.]
- agelaia, Meek, 1872, Hayden's Geo. Rep., Low. Carb. [Sig. belonging to a herd, common.]
- alta, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Sig. high, noble.]
- amara, Swallow, 1860, Trans. St. Louis Acad. Sci., Chemung Gr. [Sig. brackish, salt.]
- angusta, Hall, 1857, 10th Reg. Rep., Ham. Gr. [Sig. narrow, short.]
- annae, Swallow, 1860, Trans. St. Louis Acad. Sci., Ham. Gr. [Ety. proper name.]
- arata*, syn. for *S. granulifera*.
- archiaci*, see *S. disjuncta*.
- arctisegmenta, Hall, 1857, 10th Reg. Rep., Up. Held. Gr. [Sig. having narrow segments or ribs.]
- arenosa, Conrad, 1839, (Delthyris arenosa) Ann. Rep. N. Y., Oriskany sandstone. [Sig. sandy.]
- arrecta, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. erect, steep.]
- aspera, Hall, 1858, Geo. Rep. Iowa, Ham. Gr. [Sig. rough.]
- audacula, Conrad, (Delthyris audacula) 1842, Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. rather bold.]
- bialveata, Conrad, (Delthyris bialveata) 1842, Jour. Acad. Nat. Sci., vol. 8, Niagara Gr. [Sig. double-channeled.]
- bicostata, Vanuxem, 1842, (Orthis bicostatus) Geol. Rep. 3rd Dist. N. Y., Niagara Gr. [Sig. double-ribbed.]
- bidorsalis, Winchell, 1866, Rep. Low. Penin. Mich., Ham. Gr. [Sig. double-backed.]
- bifurcata, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. bifurcated, forked.]
- biloba, Linnaeus, 1768, (Anomia biloba) Syst. Nat., Niagara Gr. [Sig. two-lobed.]
- bimesialis, Hall, 1858, Geo. Rep. Iowa, vol. 1, pt. 2, Ham. Gr. [Sig. having two middle parts.]
- biplicata, Hall, 1858, Geo. Rep. Iowa, vol. 1, pt. 2, Kinderhook Gr. [Sig. two-folded or plaited.]
- boonensis, Swallow, 1860, Trans. St. Louis Acad. Sci., Low. Coal Meas. [Ety. proper name.]
- brachynota, Hall, 1843, (Delthyris brachynota) Geo. 4th Dist. N. Y., Clinton Gr. [Sig. short-ridged.]
- calcarata*, syn. for *S. disjuncta*.
- camerata, Morton, 1836, Am. Jour. Sci., vol. 29, Coal Meas. [Sig. vaulted or arched.]
- camerata var. *kansasensis*, Swallow, 1866, Trans. St. Louis Acad. Sci., vol. 2, Coal Meas. [Ety. proper name.]
- camerata var. *percrassa*, Swallow, 1866, Trans. St. Louis Acad. Sci., vol. 2, Coal Meas. [Sig. very thick.] This name was preoccupied as a species.

- capax, Hall, 1858, Geo. Rep. Iowa, vol. 1, pt. 2, Kinderhook Gr. [Sig. large, capacious.]
- carteri, Hall, 1857, 10th Reg. Rep., Waverly Gr. [Ety. proper name.]
- cedarensis, Owen, 1852, Geo. Sur. Wis., Iowa and Minn., Ham. Gr. [Ety. proper name.]
- centronata, Winchell, 1865, Proc. Acad. Nat. Sci., Cuyahoga shale. [Sig. having knots or points.]
- clara, Swallow, 1853, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. remarkable.]
- clavatula, McChesney, 1861, Desc. New Pal. Foss., Burlington Gr. [Sig. little club.]
- clintoni*, syn. for *S. granulifera*.
- clio*, syn. for *S. ziczac*.
- compacta, Meek, 1868, Trans. Chi. Acad. Sci., Ham. Gr. [Sig. joined, compact.]
- concinna, Hall, 1857, 10th Reg. Rep., Low. Held. Gr. [Sig. handsome.]
- congesta*, syn. for *S. granulifera*.
- consors, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. common.]
- contracta, Meek & Worthen, 1866, Geol. Sur. Ill., vol. 2, Chester Gr. [Sig. contracted, gathered.]
- cooperensis, Swallow, 1860, Trans. St. Louis Acad. Sci., Chemung Gr. [Ety. proper name.]
- corticiosa, Hall, 1857, 10th Reg. Rep., Ham. Gr. [Sig. covered with thick bark.]
- crenistria*, see *Streptorhynchus crenistria*.
- crispa, Hisinger, 1826, (*Terebratula crispa*) Act. Acad. Sci. Holm., Niagara Gr. [Sig. curled.]
- cumberlandiæ, Hall, 1857, 10th Reg. Rep., Oriskany sandstone. [Ety. proper name.]
- cuspidata, Sowerby, 1812, Min. Conch., vol. 1, Devonian. [Sig. pointed.]
- cycloptera, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. *kuklos*, a circle; *pteron*, a wing.]
- cyrtiniformis, Hall, 1873, 23rd Reg. Rep., Chemung Gr. [Sig. like a shell of the genus *Cyrtina*.]
- decemplicata, Hall, 1843, (*Delthyris decemplicata*) Geo. Rep. 4th Dist. N. Y., Niagara Gr. [Sig. having ten plications.]
- disjuncta, Sowerby, 1840, Trans. Geo. Soc., 2nd ser., vol. 5, Chemung Gr. [Sig. divided.]
- disparilis, Hall, 1857, 10th Reg. Rep., Up. Held. Gr. [Sig. unequal.]
- distans*, syn. for *S. disjuncta*.
- divaricata, Hall, 1857, 10th Reg. Rep., Cornif. & Ham. Gr. [Sig. straddling.]
- dubia*, see *Pentamerella dubia*.
- duodenaria, Hall, 1843, (*Delthyris duodenaria*) Geol. 4th Dist. N. Y., Schoharie grit & Cornif. Gr. [Sig. twelve.]
- duplicata, Conrad, 1842, (*Delthyris duplicata*) Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. double-plicated.]
- eatoni*, see *S. medialis* var. *eatoni*.
- engelmanni, Meek, 1860, Proc. Acad. Nat. Sci., Oriskany sandstone. [Ety. proper name.]
- eudora, Hall, 1861, Rep. of Prog. Wis. Sur., Niagara Gr. [Ety. proper name.]
- euruteines, Owen, 1840, (*Delthyris euruteines*) Report on Min. Lands, Up. Held. Gr. [Sig. widely extended; from the long hinge line.]
- euruteines var. *fornacula*, Hall, 1857, (*S. fornacula*) 10th Reg. Rep., Ham. Gr. [Sig. a little oven.]
- exporrecta, see *Cyrtia exporrecta*.
- exporrecta* var. *arrecta*, see *Cyrtia exporrecta* var. *arrecta*.
- extensa*, syn. for *S. disjuncta*.
- extenuata, Hall, 1858, Geo. Rep. Iowa, Kinderhook Gr. [Sig. drawn out to a thin edge.]
- fasciger*, Keyserling in Owen's report, see *Spirifera camerata*.
- fastigiata, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. pointed, peaked like a roof.]
- filicosta, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. having thread-like costæ.]
- fimbriata, Conrad, 1842, (*Delthyris fimbriata*) Jour. Acad. Nat. Sci., vol. 8, Oriskany sandstone, Schoharie grit, Cornif. and Ham. Gr. [Sig. fringed.]
- forbesi, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., vol. 3, Burlington & Chester Gr. [Ety. proper name.]
- formosa, Hall, 1857, 10th Reg. Rep., Ham. Gr. [Sig. beautiful.]
- fornax, Hall, 1857, 10th Reg. Rep., Ham. Gr. [Sig. a furnace.]
- franklini, Meek, 1858, Trans. Chi. Acad. Sci., Ham. Gr. [Ety. proper name.]
- fultonensis, Worthen, 1873, Geol. Rep. Ill., vol. 5, Low. Coal Meas. [Ety. proper name.]
- gaspensis, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Ety. proper name.]
- gibbosa, Hall, 1861, Rep. of Progr. Wis. Sur., Niagara Gr. [Sig. gibbous, tumid.]
- gigantea*, syn. for *S. disjuncta*.
- glabra var. *contracta*, Meek & Worthen, 1861, Proc. Acad. Nat. Sci., Chester Gr. [Sig. contracted.]
- glabra, Martin, 1809, (*Anomites glabra*) Petrif. Derb., Low. Carb. [Sig. smooth.]
- glanscerasi, White, 1862, Proc. Bost. Soc. Nat. Hist., Ham. Gr. [Sig. mast of the cherry tree.]
- grandæva*, syn. for *S. disjuncta*.
- granulifera, Hall, 1843, (*Delthyris granulifera*) Geol. 4th Dist. N. Y., Ham. Gr. [Sig. bearing granules.]

- granulosa*, Conrad, 1839, (*Delthyris granulosa*) Ann. Rep. N. Y., Low. Held. Gr. [Sig. covered with small granules.]
- gregaria*, Clapp, 1857, 10th Reg. Rep. & Can. Jour., Up. Held. Gr. [Sig. occurring in flocks or masses.]
- grieri*, Hall, 1857, 10th Reg. Rep., Schorharie grit & Cornif. Gr. [Ety. proper name.]
- grimesi*, Hall, 1858, Geo. Rep. of Iowa, Burlington Gr. [Ety. proper name.]
- guadalupensis*, Shumard, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- hannibalensis*, Swallow, 1860, Trans. St. Louis Acad. Sci., Low. Carb. [Ety. proper name.]
- hemicyclus*, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Oriskany sandstone. [Sig. a half circle.]
- hemiplicata*, see *Syntrielasma hemiplicatum*.
- heteroclithus*, syn. for *S. granulifera*.
- hungerfordi*, Hall, 1858, Geo. Rep. Iowa, vol. 1, pt. 2, Ham. Gr. [Ety. proper name.]
- huronensis*, Winchell, 1862, Proc. Acad. Nat. Sci., Portage Gr. [Ety. proper name.]
- imbrex*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. the gutter or roof tile.]
- incerta*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. uncertain, doubtful.]
- inconstans*, syn. for *Spirifera racinensis*.
- increbescens*, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Sig. abundant.]
- increbescens var. americana*, Swallow, 1866, Trans. St. Louis Acad. Sci., vol. 2, Kaskaskia Gr. [Ety. proper name.]
- increbescens var. transversalis*, Hall, 1858, Geol. Rep. Iowa, Kaskaskia Gr. [Sig. transverse.]
- inæquicostata*, Owen, 1852, Geo. Rep. Wis., Iowa & Min., Carb. [Sig. having unequal costæ or ribs.]
- inornata*, syn. for *S. disjuncta*.
- insolita*, Winchell, 1862, Proc. Acad. Nat. Sci., Portage Gr. [Sig. unusual.]
- intermedia*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. intermediate.] This name was preoccupied by Brongniart in 1829.
- inutilis*, Hall, 1858, Geo. Rep. Iowa, vol. 1, pt. 2, Ham. Gr. [Sig. insignificant.]
- iowensis*, Owen, 1852, Geo. Sur. Wis., Iowa & Min., Ham. Gr. [Ety. proper name.]
- kelloggi*, Swallow, 1863, Trans. St. Louis Acad. Sci., Keokuk Gr. [Ety. proper name.]
- kennicotti*, Meek, 1868, Trans. Chi. Acad. Sci., Ham. Gr. [Ety. proper name.]
- kentuckiensis*, see *Spiriferina kentuckiensis*.
- kentuckiensis var. propatula*, see *Spiriferina kentuckiensis var. propatula*.
- keokuk*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Ety. proper name.]
- keokuk var. shelbyensis*, Swallow, 1866, Trans. St. Louis Acad. Sci., vol. 2, Keokuk Gr. [Ety. proper name.]
- lævigata*, Swallow, 1863, Trans. St. Louis Acad. Sci., Keokuk Gr. [Sig. smoothed.]
- lævis*, Hall, 1843, (*Delthyris lævis*) Geol. 4th Dist. N. Y., Portage Gr. [Sig. smooth.]
- lamellosa*, see *Athyris lamellosa*.
- laminosus*, McCoy, as identified by Geinitz, is *Spiriferina kentuckiensis*.
- lateralis*, Hall, 1858, Geo. Rep. Iowa, Warsaw Gr. [Sig. belonging to the side.]
- latoi*, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. wider.]
- leidyi*, Norwood & Pratten, 1854, Jour. Acad. Nat. Sci., 2d series, vol. 3, Chester Gr. [Ety. proper name.]
- leidyi var. chesterensis*, Swallow, 1866, Trans. St. Louis Acad. Sci., vol. 2, Chester Gr. [Ety. proper name.]
- leidyi var. merrimacensis*, Swallow, 1866, Trans. St. Louis Acad. Sci., vol. 2, Warsaw Gr. [Ety. proper name.]
- ligus*, syn. for *S. pinnata*.
- lineatoides*, Swallow, 1860, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. like *S. lineatus*.]
- lineata*, Martin, 1809, Petrif. Derb., Coal Meas. [Sig. marked with lines.]
- lineatus var. striato-lineatus*, Swallow, 1866, Trans. St. Louis Acad. Sci., vol. 2, Coal Meas. [Sig. striated and lined.]
- littoni*, Swallow, 1860, Trans. St. Louis Acad. Sci., St. Louis Gr. [Ety. proper name.]
- logani*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Ety. proper name.]
- lonsdalei*, syn. for *S. disjuncta*.
- macra*, Hall, 1857, 10th Reg. Rep. Schorharie grit & Cornif. Gr. [Sig. lean.]
- macra*, Meek. This name was preoccupied.
- macronota*, Hall, 1843, (*Delthyris macronota*) Geol. 4th Dist. N. Y., Ham. Gr. [Sig. long-sided.]
- macropleura*, Conrad, 1840, (*Delthyris macropleura*) Ann. Rep. N. Y., Low. Held. Gr. [Sig. long-sided.]
- macroptera*, as identified by d'Archiac & Verneuil, is *S. mucronota*.
- macrothyris*, Hall, 1857, 10th Reg. Rep., Up. Held. Gr. [Sig. having a long foramen.]
- maia*, Billings, 1860, (*Athyris maia*) Can. Jour. Ind. Sci. & Arts, Cornif. Gr. [Ety. mythological name.]
- manni*, Hall, 1857, 10th Reg. Rep., Cornif. Gr. [Ety. proper name.]
- marcyi*, Hall, 1857, 10th Reg. Rep., Ham. Gr. [Ety. proper name.]
- marionensis*, Shumard, 1855, Geo. Rep. Mo., Ham. Gr. [Ety. proper name.]

- medialis, Hall, 1843, (*Delthyris medialis*) Geo. 4th Dist. N. Y., Ham. Gr. [Sig. middle.]
- medialis *var.* eatoni, Hall, 1857, (*Spirifer eatoni*) 10th Reg. Rep., Ham. Gr. [Ety. proper name.]
- meeki, Swallow, 1860, Trans. St. Louis Acad. Sci., Low. Carb. [Ety. proper name.]
- meristoides, Meek, 1868, Trans. St. Louis Acad. Sci., Ham. Gr. [Sig. in the form of a shell of the genus *Merista*.]
- mesocostalis, Hall, 1843, (*Delthyris mesocostalis* and *D. acuminata*) Geo. 4th Dist. N. Y., Chemung Gr. [Sig. having middle costæ.]
- mesostrialis, Hall, 1843, (*Delthyris mesostrialis*) Geo. 4th Dist. N. Y., Ham. and Chemung Gr. [Sig. having middle striae.]
- meta, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Sig. a pillar in the form of a cone.]
- meusebachianus*, syn. for *Spirifera camerata mexicana*, Shumard, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- missouriensis, Swallow, 1860, Trans. St. Louis Acad. Sci., Chemung Gr. [Ety. proper name.]
- modesta, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. in allusion to its small size.]
- mucronata, Conrad, 1841, (*Delthyris mucronata*) Ann. Rep. N. Y., Marcellus shale, Ham. Gr. [Sig. sharp-pointed.]
- multistriata*, see *Trematospira multistriata*.
- mysticensis, Meek, 1872, Hayden's Geo. Rep., Low. Carb. [Ety. proper name.]
- neglecta, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. overlooked, neglected.]
- niagarensis, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Niagara Gr. [Ety. proper name.]
- niagarensis *var.* oligoptycha, Roemer, 1860, Sil. Fauna West Tenn., Niagara Gr. [Ety. *oligos*, few; *ptyche*, a fold.]
- norwoodiana, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]
- norwoodi, Meek, 1860, Proc. Acad. Nat. Sci., Devonian. [Ety. proper name.]
- octocostata, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. having eight costæ or folds.]
- octoplicata*, Sowerby, 1827, as identified by Hall, syn. for *Spiriferina kentuckiensis*.
- opima, Hall, 1858, Geo. Rep. Iowa, Coal Meas. [Sig. large.]
- orestes, Hall, 1873, 23rd Reg. Rep., Chemung Gr. [Ety. mythological name.]
- oregonensis, Shumard, 1863, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]
- osagensis, Swallow, 1860, Trans. St. Louis Acad. Sci., Chemung Gr. [Ety. proper name.]
- oweni, Hall, 1857, 10th Reg. Rep., Up. Held. Gr. [Ety. proper name.]
- pachyptera*, Goldfuss, as identified by Conrad in 1839, (*Delthyris pachyptera*). Not American.
- parryana, Hall, 1858, Geo. Rep. Iowa, vol. 1, pt. 2, Ham. Gr. [Ety. proper name.]
- peculiaris, Shumard, 1855, Geo. Rep. Mo., Chemung Gr. [Sig. peculiar, singular.]
- perforata*, see *Trematospira perforata*.
- pinnata, Owen, 1852, Geo. Rep. Wis., Iowa & Min., Ham. Gr. [Sig. winged.]
- percrassa*, McCoy, 1855, Brit. Pal. Rocks., Sil. Not satisfactorily identified in America.
- perextensa, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Carb. [Sig. very extended.]
- (?) *perforata*, see *Trematospira perforata*.
- perlamellosa, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. having very thin plates.]
- perplexa, McChesney, 1860, New Pal. Foss., Coal Meas. [Sig. very perplexing.]
- pertenuis, Hall, 1857, 10th Reg. Rep., Ham. Gr. [Sig. very slender.]
- pharovicina, Winchell, 1862, Proc. Acad. Nat. Sci., Portage Gr. [Sig. close by the light house.]
- pinonensis, Meek, 1870, Proc. Acad. Nat. Sci., Up. Held. Gr. [Ety. proper name.]
- planoconvexa, Shumard, 1855, Geo. Rep. Mo., Coal Meas. [Ety. *planus*, plane; *convexus*, convex.]
- plena, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. full, large.]
- plicata*, Vanuxem, 1843, see *S. vanuxemi*.
- prematura, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Sig. too early, ripe before its time.]
- prolata, Vanuxem, 1842, (*Delthyris prolata*) Geo. Rep. N. Y., Chemung Gr. [Sig. prolonged.]
- propinqua, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Ety. related to; from its resemblance to *S. subcuspidata*.]
- prora, Conrad, 1842, (*Delthyris prora*) Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. the prow of a ship.]
- protensa*, syn. for *S. disjuncta*.
- pseudolineata, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. false-lined.]
- pulchra, Meek, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. beautiful.]
- pyramidalis*, see *Cyrtina pyramidalis*.
- pyxidata, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. made like a box.]
- racinensis, McChesney, 1861, Pal. Foss., Niagara Gr. [Ety. proper name.]
- radiata, Sowerby, 1825, Min. Conch., vol. 5, Niagara Gr. [Sig. radiated.]

- raricosta*, Conrad, 1842, (*Delthyris raricosta*) Jour. Acad. Nat. Sci., vol. 8, Schoharie grit and Cornif. Gr. [Sig. with few costæ.]
- resupinata*, as identified by d'Archiac & Verneuil. Not American.
- richardsoni*, Meek, 1868, Trans. Chi. Acad. Sci., Ham. Gr. [Ety. proper name.]
- rockymontana*, Marcou, 1858, Geo. N. Amer., Low. Carb. [Ety. proper name.]
- rostellata*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. having a little beak.]
- rostellum*, Hall, 1872, 24th Reg. Rep., Niagara Gr. [Sig. a little beak.]
- rugicosta*, Hall, 1860, Can. Nat. Geo., vol. 5, Up. Sil. [Sig. having furrowed or wrinkled plaits or folds.]
- rugatina*, Conrad, 1842, (*Delthyris rugatina*) Jour. Acad. Nat. Sci., vol. 8, Niagara Gr. [Sig. having little folds.]
- saffordi*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- scobina*, Meek, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. a rasp.]
- sculptilis*, Hall, 1843, (*Delthyris sculptilis*) Geo. Rep. 4th Dist. N. Y., Ham. Gr. [Sig. carved or graven.]
- segmentata*, Hall, 1857, 10th Reg. Rep., Up. Held. Gr. [Sig. made up of segments or pieces.]
- semiplicata*, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. half-plicated.]
- setigera*, Hall, 1858, Geo. Rep. Iowa, Kaskaskia Gr. [Sig. bristly.]
- sillana*, Winchell, 1865, Proc. Acad. Nat. Sci., Cuyahoga shale. [Ety. proper name.]
- similior*, see *Pentamerus similior*.
- solidirostris*, White, 1860, Bost. Jour. Nat. Hist., Kinderhook Gr. [Sig. solid-beaked.]
- spinosa*, see *Spiriferina spinosa*.
- staminea*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Niagara Gr. [Sig. made of threads, thready.]
- striatiformis*, Meek, 1875, Ohio Pal., vol. 2, Waverly Gr. [Sig. like *S. striata*.]
- striata*, Martin, 1809, (*Anomites striatus*) Petrif. Derb., Carb. [Sig. striated.]
- striata var. triplicata*, Marcou, 1858, Geol. North America, Low. Carb. [Sig. three-plicated.]
- striatulus*, as identified by d'Archiac & Verneuil. Not American.
- subæqualis*, Hall, 1858, Geo. Rep. Iowa, Warsaw Gr. [Sig. somewhat equal.]
- subattenuata*, Hall, 1858, Geo. Rep. Iowa, Ham. Gr. [Sig. somewhat attenuated.]
- subcardiformis*, Hall, 1858, Geo. Rep. Iowa, Warsaw Gr. [Sig. somewhat heart-shaped.]
- subcuspidata*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. somewhat-pointed.]
- subelliptica*, McChesney, 1860, New Pal. Foss., Coal Meas. [Sig. somewhat elliptical.]
- sublineata*, Meek, 1868, Trans. Chi. Acad. Sci., Ham. Gr. [Sig. somewhat striated.]
- submucronata*, Hall, 1857, 10th Reg. Rep., Oriskany sandstone. [Sig. somewhat sharp-pointed.]
- submucronata*, Hall, 1858, Geo. Rep. Iowa, vol. 1, pt. 2, Ham. Gr. This name was preoccupied. See *S. subattenuata*.
- suborbicularis*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. somewhat orb-shaped.]
- subrotundata*, Hall, 1858, Geo. Rep. Iowa, vol. 1, pt. 2, Kinderhook Gr. [Sig. somewhat rounded.]
- subsulcata*, Hall, 1860, Can. Nat. and Geol., vol. 5, Up. Sil. [Sig. somewhat furrowed.] This name was preoccupied by Dalman in 1828.
- subumbonata*, Hall, 1857, (*Orththis subumbona*) 10th Reg. Rep., (*Ambocoelia subumbona*) 13th Reg. Rep., Ham. Gr. and Tully limestone. [Sig. somewhat protuberant.]
- subundifera*, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Ham. Gr. [Sig. somewhat wavy.]
- subvaricosa*, Hall, 1873, 23rd Reg. Rep., Up. Held. Gr. [Sig. somewhat varicose.]
- subventricosa*, syn. *S. opima*.
- sulcata*, Hisinger, 1837, (*Delthyris sulcatus*) Petrif. Suecica, Niagara Gr. [Sig. furrowed.]
- sulcifera*, Shumard, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. bearing furrows.]
- superba*, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Sig. superb.] The name was preoccupied by Eichwald in 1842.
- tenuicostata*, Hall, 1858, Geo. Rep. Iowa, Warsaw Gr. [Sig. slender-ribbed.]
- tenuimarginata*, Hall, 1858, Geo. Rep. Iowa, Keokuk Gr. [Sig. thin-margined.]
- tenuis*, Hall, 1857, 10th Reg. Rep., Ham. Gr. [Sig. slender, thin.]
- tenuistriata*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. having fine radiating striæ.]
- tenuistriata*, Shaler, 1865. The name was preoccupied.
- texana*, Meek, 1871, Proc. Acad. Nat. Sci., Coal Meas. [Ety. proper name.]
- texta*, Hall, 1857, 10th Reg. Rep., Che-mung Gr. [Sig. woven.]
- translata*, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. transferred.]
- transversa*, McChesney, 1860, New Pal. Foss., Chester Gr. [Sig. transverse, crosswise.]
- tribulis*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. one of the same flock.]

- triplicata*, syn. for *Spirifera camerata*.  
*tullia*, Hall, 1867, Pal. N. Y., vol. 4, Ham. Gr. [Ety. proper name.]
- undulata*, Vanuxem, 1843, (*Delthyris undulatus*) Geo. 3rd Dist. N. Y., Onondaga Gr. [Sig. undulating.] The name was preoccupied.
- unica*, Hall, 1867, Pal. N. Y., vol. 4, Cornif. Gr. [Sig. excellent, chief.]
- vanuxemi*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr., described as *Orthis plicata* by Vanuxem in the Geo. Rep. 3rd Dist. N. Y., but that name was preoccupied. [Ety. proper name.]
- varicosa*, Hall, 1857, 10th Reg. Rep., Up. Held. Gr. [Sig. varicose.]
- ventricosa*, see *Nucleospira ventricosa*.
- venusta*, syn. for *Spirifera divaricata*.
- vernonsensis*, Swallow, 1860, Trans. St. Louis Acad. Sci., Chemung Gr. [Ety. proper name.]
- verneuli*, syn. for *S. disjuncta*.
- whitneyi*, Hall, 1858, Geo. Rep. Iowa, Ham. and Chemung Gr. [Ety. proper name.]
- wortheni*, Hall, 1857, 10th Reg. Rep., Ham. Gr. [Ety. proper name.]
- ziczac*, Hall, 1843, (*Delthyris zigzag*) Geo. Rep. 4th Dist. N. Y., Ham. Gr. [Sig. slanting in straight lines from side to side.]
- SPIRIFERINA**, D'Orbigny, 1847, Consid. Zool. et Geol. Sur. les Brachiopodes, Comptes rendus des Sciences de l'Academie des Sciences. [Ety. *Spirifera*, a genus of shells; *inus*, implying resemblance.]
- billingsi*, Shumard, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- binacuta*, Winchell, 1865, Proc. Acad. Nat. Sci., Burlington Gr. [Ety. *bis*, double; *acutus*, acute.]
- clarksvillensis*, Winchell, 1865, Proc. Acad. Nat. Sci., Low. Carb. [Ety. proper name.]
- kentuckiensis*, Shumard, 1855, (*Spirifera kentuckiensis*) Geo. Rep. Mo., Coal Meas. [Ety. proper name.]
- kentuckiensis var. propatula*, Swallow, 1866, (*Spirifera kentuckiensis var. propatula*) Trans. St. Louis Acad. Sci., vol. 2, Coal Meas. [Sig. open.]
- spinosa*, Norwood & Pratten, (*Spirifera spinosa*) 1855, Jour. Acad. Nat. Sci., vol. 3, 2d series, Warsaw Gr. [Sig. spiny.]
- spinosa var. campestris*, White, 1874, Rep. Invert. Foss., Carb. [Sig. of or belonging to the plain fields, rustic.]
- subtexta*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. somewhat woven.]
- Spirigera*, syn. for *Athyris*.
- americana*, syn. for *A. americana*.
- biloba*, syn. for *A. biloba*.
- caput-serpentis*, syn. for *A. caput-serpentis*.
- charitonensis*, syn. for *A. charitonensis*.
- clintonensis*, syn. for *A. clintonensis*.
- concentrica*, syn. for *A. spiriferoides*.
- corpulenta*, syn. for *A. corpulenta*.
- eborea*, syn. for *A. eborea*.
- euzona*, syn. for *A. euzona*.
- formosa*, syn. for *A. formosa*.
- fultonensis*, syn. for *A. fultonensis*.
- hannibalensis*, syn. for *A. hannibalensis*.
- hawni*, syn. for *A. hawni*.
- jacksoni*, syn. for *A. jacksoni*.
- maconensis*, syn. for *A. maconensis*.
- minima*, syn. for *A. minima*.
- missouriensis*, syn. for *A. missouriensis*.
- monticola*, syn. for *A. monticola*.
- obmaxima*, syn. for *A. obmaxima*.
- ohioensis*, syn. for *A. ohioensis*.
- pectinifera*, syn. for *A. pectinifera*.
- plattensis*, syn. for *A. plattensis*.
- prouti*, syn. for *A. prouti*.
- reflexa*, syn. for *A. reflexa*.
- singletoni*, syn. for *A. singletoni*.
- spiriferoides*, syn. for *A. spiriferoides*.
- STENOSCHISMA**, Conrad, 1839, Ann. Rep. N. Y. [Ety. *stenos*, narrow; *schisma*, a fissure.] Written *Stenocisma* by Conrad.
- billingsi*, Hall, 1867, Pal. N. Y., vol. 4, Cornif. Gr. The same that Billings called *Rynchonella thalia*, Can. Jour., 1860, but the name was preoccupied. [Ety. proper name.]
- carica*, Hall, 1867, Pal. N. Y., vol. 4, Ham. Gr. [Sig. a kind of dry fig.]
- carolina*, Hall, 1867, Pal. N. Y., vol. 4, Cornif. Gr. [Ety. proper name.]
- congregatum*, Conrad, 1841, (*Atrypa congregata*) Ann. Rep. N. Y., Ham. Gr. [Sig. gathered together.]
- contractum*, Hall, 1843, (*Atrypa contracta*) Geo. 4th Dist. N. Y., Chemung Gr. [Sig. contracted, drawn together.]
- contractum var. saxatile*, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Sig. that lives among stone or rocks.]
- dotis*, Hall, 1867, Pal. N. Y., vol. 4, Ham. Gr. [Sig. an ornament.]
- duplicatum*, Hall, 1843, (*Atrypa duplicata*) Geo. 4th Dist. N. Y., Chemung Gr. [Sig. doubled.]
- eximium*, Hall, 1843, (*Atrypa eximia*) Geo. 4th Dist. N. Y., Chemung Gr. [Sig. choice, select.]
- horsfordi*, Hall, 1860, 13th Reg. Rep., Cornif. Gr., Marcellus shale & Ham. Gr. [Ety. proper name.]
- orbiculare*, Hall, 1860, (*Rhynchonella orbicularis*) 13th Reg. Rep., Chemung Gr. [Sig. orb-shaped.]
- prolificum*, Hall, 1867, Pal. N. Y., vol. 4, Ham. Gr. [Sig. fruitful, prolific.]
- royanum*, Hall, 1860, Pal. N. Y., vol. 4, Cornif. Gr. [Ety. proper name.]
- sappho*, Hall, 1860, (*Rhynchonella sappho*) 13th Reg. Rep., Marcellus shale & Ham. Gr. [Ety. proper name.]
- stephani*, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Ety. proper name.]

- tethys, Billings, 1860, (*Rhynchonella tethys*) Can. Jour., Cornif. Gr. [Ety. mythological name.]
- STREPTORHYNCHUS**, King, 1850, Monograph of Permian Fossils. [Ety. *strepto*, I bend or twist; *rhynchos*, a beak.]
- antiquatus, Sowerby, 1839, (*Strophomena antiquata*) Murch. Sil. Syst., Mid. Sil. [Sig. ancient.]
- arctostriatus, Hall, 1843, (*Strophomena arctostriata*) Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. closely striated.]
- arctostriatus*, Hall, 1860, 13th Reg. Rep., (*Orthisina arctostriata*) Ham. Gr. This name was preoccupied.
- chemungensis, Conrad, 1843, (*Strophomena chemungensis*) Jour. Acad. Nat. Sci., Chemung Gr. [Ety. proper name.]
- crassus, Meek & Hayden, 1858, (*Orthisina crassa*) Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. thick.]
- crenistriatus, Phillips, 1836, (*Spirifera crenistria*) Geo. York., vol. 2, Waverly Gr. [Sig. having crooked striae.]
- deflectus, Conrad, 1843, (*Strophomena deflecta*) Proc. Acad. Nat. Sci. Phil., Trenton Gr. [Sig. bent down.]
- elongatus, James, 1874, Cin. Quar. Jour. Sci., Cin'ti Gr. [Sig. from the long cardinal line.]
- filitextus, Hall, 1847, (*Strophomena filitexta*) Pal. N. Y., vol. 1, Trenton and Hud. Riv. Gr. [Sig. woven like thread.]
- hallianus, S. A. Miller, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Ety. proper name.]
- hemiaster*, syn. for *S. subplanum*.
- lens, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Chemung Gr. [Sig. a concavo-convex shell.]
- nutans, James, 1873, (*Hemipronites nutans*) Pal. Ohio, vol. 1, Cin'ti Gr. [Sig. bent over.]
- occidentalis, Newberry, 1861, Ives' Col. Ex. Exped., Up. Carb. [Sig. western.]
- pandora, Billings, 1860, Can. Jour., Schorharie grit and Cornif. Gr. [Ety. mythological name.]
- pectinaceus, Hall, 1843, (*Strophomena pectinacea* and *S. bifurcata*) Geo. Rep. 4th Dist. N. Y., Chemung Gr. and Waverly sandstone. [Sig. like a *Pecten*.]
- perversus, Hall, 1857, (*Orthis perversa*) 10th Reg. Rep. (*Orthisina alternata*, 1860, 13th Reg. Rep.) Cornif. and Ham. Gr. [Sig. turned upside down.]
- planoconvexus, Hall, 1847, (*Leptæna planoconvexa*) Pal. N. Y., vol. 1, Hud. River Gr. [Ety. *planus*, plane; *convexus*, convex.]
- planumbonus, Hall, 1847, (*Leptæna planumbona*) Pal. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Sig. flat on the umbo.]
- pyramidalis, Newberry, 1861, Ives' Col. Ex. Exped., Carb. [Sig. pointed like a pyramid.]
- radiatus, Vanuxem, 1843, (*Strophomena radiata*) Geo. Rep. 3rd Dist. N. Y., Low. Held. Gr. [Sig. radiated.]
- rectus, Conrad, 1843, (*Strophomena recta*) Proc. Acad. Nat. Sci., vol. 1, Black Riv. and Trenton Gr. [Sig. straight.]
- sinuatus, Emmons, 1855, Am. Geol., Cin'ti Gr. [Sig. marked with depressions, wavy.]
- subplanus, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, (*Strophomena subplana*) Niagara Gr. [Sig. somewhat flat.]
- subtentus, Conrad, 1847, (*Strophomena subtenta*) Pal. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Sig. somewhat bent.]
- sulcatus, Verneuil, 1848, (*Leptæna sulcata*) Bull. Geol. Soc. France, vol. 5, Cin'ti Gr. [Sig. furrowed.]
- tenuis, Hall, 1858, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. slight, slender.]
- umbraculum, V. Buch, (*Orthis umbraculum*) Ueber Delthyris, &c., Devonian to the Permian Gr. [Sig. an umbrella.]
- vetustus, James, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Sig. old.]
- woolworthianus, Hall, 1859, (*Strophomena woolworthiana*) Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- Stricklandia*, Billings, 1859, Can. Nat. Geo., vol. 4. This name having been previously applied to a genus of fossil plants the author abandoned it and proposed Stricklandinia.
- STRICKLANDINIA**, Billings, 1863, Can. Nat. & Geo., vol. 8. [Ety. proper name.]
- anticostiensis, Billings, 1863, Can. Nat. Geo., vol. 8, Anticosti Gr. [Ety. proper name.]
- (?) arachne, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]
- (?) arethusa, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]
- brevis, Billings, 1859, Can. Nat. Geo., vol. 4, Mid. Sil. [Sig. short.]
- canadensis, Billings, 1859, Can. Nat. Geo., vol. 4, Clinton Gr. [Ety. proper name.]
- castellana, White, 1876, Proc. Acad. Nat. Sci., Niagara Gr. [Ety. proper name.]
- davidsoni, Billings, 1868, Lond. Geo. Mag., vol. 5, Up. Sil. [Ety. proper name.]
- deformis, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., Niagara Gr. [Sig. deformed, ugly shaped.]
- elongata*, see *Amphigenia elongata*.
- elongata var. curta*, see *Amphigenia curta*.
- gaspensis, Billings, 1859, Can. Nat. Geo., vol. 4, Mid. Sil. [Ety. proper name.]



- lens*. The fossil referred to this species was afterward described as *S. davidsoni*.
- melissa*, Billings, 1874, Pal. Foss., vol. 2, Mid. Sil. [Ety. mythological name.]
- salteri*, Billings, 1874, Pal. Foss., vol. 2, Mid. Sil. [Ety. proper name.]
- STROPHODONTA**, King, 1844, Ann. & Mag. Nat. Hist., vol. 14. [Ety. *strophe*, a bending; *alos*, a disc.]
- horrescens*, Geinitz, 1866, Carb. und Dyas in Neb. Prof. Meek regarded this name as a syn. for *Productus nebrascensis*.
- numularis*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. like a little coin.]
- subaculeata*, Murchison, 1845, Bul. Geol. Soc. de France, Coal Meas. [Sig. somewhat thorny or furnished with prickles.]
- STROPHODONTA**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *strophos*, bent; *odous*, tooth.]
- æquicostata*, Swallow, 1860, Trans. St. Louis Acad. Sci., Ham. Gr. [Sig. equal-ribbed.]
- altidorsata*, Swallow, 1860, Trans. St. Louis Acad. Sci., Devonian. [Sig. high backed.]
- alveata*, Hall, 1863, 16th Reg. Rep., Schoharie grit. [Sig. channeled.]
- ampla*, Hall, 1857, (Strophomena ampla) 10th Reg. Rep., Schoharie grit and Cornif. Gr. [Sig. full, large.]
- arcuata*, Hall, 1858, Geo. of Iowa, Ham. Gr. [Sig. bent, arched.]
- becki*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- boonensis*, Swallow, 1860, Trans. St. Louis Acad. Sci., Low. Devonian. [Ety. proper name.]
- cælata*, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Sig. sculptured.]
- callawayensis*, Swallow, 1860, Trans. St. Louis Acad. Sci., Ham. Gr. [Ety. proper name.]
- callosa*, Hall, 1863, 16th Reg. Rep., Schoharie grit. [Sig. having a thick shell.]
- canace*, Hall, 1873, 23rd Reg. Rep., Chemung Gr. [Ety. mythological name.]
- cavumbona*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. having a hollow umbo.]
- cayuta*, Hall, 1867, Pal. N. Y., vol. 4, Chemung Gr. [Ety. proper name.]
- cincta*, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Ety. *cinctus*, girdled; in allusion to a ridge around the border of the inside of the ventral valve.]
- concava*, Hall, 1857, (Strophomena concava) 10th Reg. Rep., Cornif. and Ham. Gr. [Sig. concave.]
- costata*, Owen, 1852, Geo. Sur. Wis., Iowa and Minn., Devonian. [Sig. ribbed.]
- crebristriata*, Conrad, 1842, (Strophomena crebristriata) Jour. Acad. Nat. Sci., vol. 8, Schoharie grit. [Sig. thickly striated.]
- cymbiformis*, Swallow, 1860, Trans. St. Louis Acad. Sci., Devonian. [Sig. boat-shaped.]
- demissa*, Conrad, 1842, (Strophomena demissa) Jour. Acad. Nat. Sci., vol. 8, Schoharie grit, Cornif., Ham. and Chemung Gr. [Sig. hanging down.]
- erratica*, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. wandering, erratic.]
- fragilis*, syn. for *Strophodonta perplana*.
- geniculata*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. geniculated.]
- headleyana*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- hemispherica*, Hall, 1857, (Strophomena hemispherica) 10th Reg. Rep., Schoharie Grit & Cornif. Gr. [Sig. hemispherical.]
- hybrida*, Hall, 1873, 23rd Reg. Rep., Chemung Gr. [Sig. a hybrid.]
- imitata*, Winchell, 1866, Rep. Low. Penin. Mich., Ham. Gr. [Sig. imitating, like *S. inæquistriata*.]
- inæquiradiata*, Hall, 1857, 10th Reg. Rep., Schoharie Grit & Cornif. Gr. [Sig. unequal-rayed.]
- inæquistriata*, Conrad, 1842, (Strophomena inæquistriata) Jour. Acad. Nat. Sci., vol. 8, Cornif. & Ham. Gr., Moscow shales. [Sig. having unequal striæ.]
- indentata*, Conrad, (Leptæna indentata) 1838, Ann. Rep. N. Y., Low. Held. Gr. [Sig. indented.]
- inflexa*, Swallow, 1860, Trans. St. Louis Acad. Sci., Devonian. [Sig. bowed, made crooked.]
- intermedia*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. intermediate.]
- iowensis*, Owen, 1852, Geo. Sur. Wis., Iowa & Minn., Devonian. [Ety. proper name.]
- junia*, Hall, 1867, Pal. N. Y., vol. 4, Cornif., Ham. & Tully Gr., (changed from *textilis*, in the corrigenda and index). [Ety. proper name.]
- kemper*, Swallow, 1860, Trans. St. Louis Acad. Sci., Devonian. [Ety. proper name.]
- leavenworthiana*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- lepida*, syn. for *S. naerea*.
- linckhni*, Hall, 1857, 10th Reg. Rep., Oriskany sandstone. [Ety. proper name.]
- magnifica*, Hall, 1857, 10th Reg. Rep., Oriskany sandstone. [Sig. magnificent.]
- magniventra*, Hall, 1857, 10th Reg. Rep., Oriskany sandstone. [Sig. large bellied.]

- mucronata*, Conrad, 1842, (*Strophomena mucronata*) Jour. Acad. Nat. Sci., vol. 8, Chemung Gr. [Sig. sharp-pointed.]  
*nacrea*, Hall, 1857, (*Strophomena nacrea*) 10th Reg. Rep., Cornif. and Ham. Gr. [Sig. iridescent, like mother of pearl.]  
*navalis*, Swallow, 1860, Trans. St. Louis Acad. Sci., Devonian. [Sig. like a ship.]  
*parva*, Owen, 1852, Geo. Sur. Wis., Iowa and Minn., Ham. Gr. [Sig. small.]  
*parva*, Hall, 1863, 16th Reg. Rep., Schoharie grit. This name was preoccupied.  
*patersoni*, Hall, 1857, (*Strophomena patersoni*) 10th Reg. Rep., Schoharie grit and Cornif. Gr. [Ety. proper name.]  
*perplana*, Conrad, 1842, (*Strophomena perplana*) Jour. Acad. Nat. Sci., vol. 8, Onondaga, Schoharie, Cornif., Ham. and Chemung Gr. [Sig. very plain.]  
*perplana var. nervosa*, Hall, 1843, (*Strophomena nervosa*) Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. full of sinews.]  
*planulata*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. flat.]  
*plicata*, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. folded, plaited.]  
*prisca*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. ancient.]  
*profunda*, Hall, 1852, (*Leptaena profunda*) Pal. N. Y., vol. 2, Niagara Gr. [Sig. deep.]  
*punctulifera*, Conrad, 1838, (*Leptaena punctulifera*) Ann. Rep. N. Y., Low. Held. Gr. [Sig. bearing punctures.]  
*reversa*, Hall, 1858, Geo. Rep. Iowa, Ham. Gr. [Sig. reversed.]  
*semifasciata*, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. half-banded.]  
*subcymbiformis*, Swallow, 1860, Trans. St. Louis Acad. Sci., Devonian. [Sig. somewhat boat-shaped.]  
*varistriata*, Conrad, 1842, (*Strophomena varistriata*) Jour. Acad. Nat. Sci., vol. 8, Low. Held. Gr. [Sig. differently striated.]  
*varistriata var. arata*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. furrowed.]  
*vascularia*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. vascular.]  
**STROPHOMENA**, Rafinesque, 1825, Manuel de Malacologie of Blainville. [Ety. *strophos*, bent; *mene*, a crescent.]  
*acutiradiata*, see *Chonetes acutiradiata*.  
*alternata*, Conrad, 1838, (*Leptaena alternata*) Ann. Rep. N. Y., Trenton and Hud. Riv. Gr. [Sig. alternating.]  
*alterniradiata*, Shaler, 1865, Bulletin, No. 4, M. C. Z., Anticosti Gr. [Sig. alternately radiated.]  
*alternistriata*, Hall, 1847, Pal. N. Y., vol. 1, Trenton and Hud. Riv. Gr. [Sig. alternately striated.]  
*alternata var. loxorhytis*, Meek, 1873, Ohio Pal., vol. 1, Cin'ti Gr. [Sig. cross-wrinkled.]  
*ampla*, see *Strophodonta ampla*.  
*analoga*, Phillips, 1836, Geol. Yorkshire, vol. 2, Low. Carb. [Sig. like analogous.]  
*anticostiensis*, syn. for *Strophomena alternata*.  
*antiquata*, see *Streptorhynchus antiquatus*.  
*arctostriata*, see *Streptorhynchus arctostriatus*.  
*arcuata*, Shaler, 1865. This name was preoccupied.  
*arethusa*, Billings, 1862, Pal. Foss., vol. 1, Hud. Riv. Gr. [Ety. mythological name.]  
*aurora*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. in the morning.]  
*bifurcata*, syn. for *Streptorhynchus pectinaceus*.  
*bipartita*, Hall, 1852, (*Leptaena bipartita*) Pal. N. Y., vol. 2, Coralline limestone. [Sig. double-partitioned.]  
*blainvilli*, Billings, 1874, Pal. Foss., vol. 2, Up. Sil. [Ety. proper name.]  
*camerata*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Trenton Gr. [Sig. arched or vaulted.]  
*carinata*, Conrad, 1838, see *Tropidoleptus carinatus*.  
*carinata*, Conrad, 1842, see *Chonetes carinata*.  
*ceres*, Billings, 1860, Can. Nat. & Geo., vol. 5, Hud. Riv. Gr. and Mid. Sil. [Ety. mythological name.]  
*chemungensis*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Chemung Gr. [Ety. proper name.]  
*concava*, see *Strophodonta concava*.  
*conradi*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]  
*convexa*, Owen, 1840, Rep. on Mineral Lands, Calif. Gr. [Sig. convex.]  
*cornuta*, see *Chonetes cornuta*.  
*corrugata*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 3, Clinton Gr. [Sig. wrinkled.]  
*crebristriata*, see *Strophodonta crebristriata*.  
*crenistria*, syn. for *Strophodonta perplana*.  
*declivis*, syn. for *Strophomena alternata*.  
*deflecta*, see *Streptorhynchus deflectus*.  
*deltoidea*, Conrad, 1839, Ann. Rep. N. Y., Trenton Gr. [Sig. shaped like the Greek letter Delta.]  
*delthyris*, syn. for *Strophodonta perplana*.  
*demissa*, see *Strophodonta demissa*.  
*depressa*, Sowerby, 1825, (*Producta depressa*) vol. 6, Min. Conchology, Up. Sil. [Sig. depressed.]  
*depressa var. ventricosa*, see *Strophomena rugosa var. ventricosa*.  
*elegantula*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Clinton Gr. [Sig. quite elegant.]

- elongata*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Low. Held. Gr. [Sig. elongated.]
- elliptica*, Conrad, 1839, Ann. Rep. N. Y., Low. Held. Gr. [Sig. elliptical.]
- euglypha*, syn. for *Strophodonta punctulifera*.
- fasciata*, Hall, 1847, (*Leptæna fasciata*) Pal. N. Y., vol. 1, Chazy Gr. [Sig. swathed, banded.]
- filitexta*, see *Streptorhynchus filitextus*.
- fluctuosa*, Billings, 1860, Can. Nat. Geo., vol. 5, Trenton & Hud. Riv. Gr. [Sig. wavy.]
- fontinalis*, White, 1874, Rep. Invert. Foss., Quebec Gr. [Ety. *fons*, a fountain or spring.]
- fracta*, Meek, 1873, Pal. Ohio, vol. 1, Cin'ti Gr. [Sig. broken, weak.]
- fragilis*, syn. for *Strophodonta perplana*.
- galatea*, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Ety. mythological name.]
- geniculata*, Shaler, (*Brachyprion geniculatum*). The name was preoccupied.
- gibbosa*, Conrad, 1841, Ann. Geo. Rep. N. Y., Onondaga Gr. [Sig. gibbous.]
- hecuba*, Billings, 1860, Can. Nat. Geo., vol. 5, Hud. Riv. Gr. [Ety. mythological name.]
- hemispherica*, see *Strophodonta hemispherica*.
- imbecillis*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. feeble.]
- imbrex*, Pander, 1845, in Russia & Ural Mountains, Hud. Riv. Gr. [Sig. imbricated.] The identification very doubtful in America.
- impressa*, syn. for *Strophodonta varistriata*.
- incrassata*, Hall, 1847, (*Leptæna incrassata*) Pal. N. Y., vol. 1, Chazy to Hud. Riv. Gr. [Sig. thickened.]
- indentata*, Conrad, 1842, Geo. Rep. 3rd Dist. N. Y., Held. Gr. [Sig. indented.]
- inæquiradiata*, see *Strophodonta inæquiradiata*.
- inæquistriata*, see *Strophodonta inæquistriata*.
- interstrialis*, Phillips, in Geo. 4th Dist. N. Y., see *Strophodonta cayuta*.
- irene*, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Ety. proper name.]
- ithacensis*, Vanuxem, 1842, Geo. Rep. N. Y., Portage Gr. [Ety. proper name.]
- julia*, Billings, 1862, Pal. Foss., vol. 1, Mid. Sil. [Ety. proper name.]
- lachrymosa*, see *Productella lachrymosa*.
- laevis*, Emmons, 1842, Geo. Rep. N. Y., Birdseye Gr. [Sig. smooth.]
- leda*, Billings, 1860, Can. Nat. Geo., vol. 5, Mid. Sil. [Ety. mythological name.]
- lepida*, syn. for *Strophodonta nacrea*.
- lima*, see *Productella lachrymosa* var. *lima*.
- lineata*, see *Chonetes lineata*.
- macra*, syn. for *Strophodonta semifasciata*.
- magniventra*, see *Strophodonta magniventra*.
- membranacea*, of Phillips, as identified by Vanuxem, 1842, Geo. 3rd Dist. N. Y., see *Productella hirsuta*.
- modesta*, Conrad, 1839, Ann. Rep. N. Y., Low. Held. Gr. [Sig. not large.]
- mucronata*, see *Strophodonta mucronata*.
- nacrea*, see *Strophodonta nacrea*.
- nasuta*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Trenton & Hud. Riv. Gr. [Sig. having a prominent nose.]
- nassula*, Conrad, 1848, Proc. Acad. Nat. Sci., vol. 3, Carb. [Sig. a little bag-net.]
- nervosa*, see *Strophodonta perplana* var. *nervosa*.
- niagarensis*, syn. for *Strophodonta profunda*.
- nitens*, Billings, 1860, Can. Nat. Geo., vol. 5, Hud. Riv. Gr. [Sig. neat.]
- nutans*, see *Streptorhynchus nutans*.
- obscura*, Hall, 1852, (*Leptæna obscura*) Pal. N. Y., vol. 2, Clinton Gr. [Sig. obscure.]
- orthididae*, Hall, 1852, (*Leptæna orthididae*) Pal. N. Y., vol. 1, Clinton Gr. [Sig. like a shell of the genus *Orthis*.]
- patenta*, Hall, 1852, (*Leptæna patenta*) Pal. N. Y., vol. 2, Clinton Gr. [Sig. spreading.] *patens* would be better orthography.
- paterstoni*, see *Strophodonta paterstoni*.
- pecten*, Linnaeus, 1758, (*Anomia pecten*) Syst. Nat., Niagara Gr. [Sig. comb-like.] Not American.
- pectinacea*, see *Streptorhynchus pectinaceus*.
- perplana*, see *Strophodonta perplana*.
- philomela*, Billings, 1860, Can. Nat. Geo., vol. 5, Mid. Sil. [Ety. mythological name.]
- planoconvexa*, see *Streptorhynchus planoconvexus*.
- planumbona*, see *Streptorhynchus planumbonus*.
- plicata*, syn. for *Streptorhynchus subtentus*.
- plicifera*, Hall, 1847, (*Leptæna plicifera*) Pal. N. Y., vol. 1, Chazy Gr. [Sig. bearing plications.]
- pluristriata*, syn. for *Strophodonta perplana*.
- profunda*, see *Strophodonta profunda*.
- punctulifera*, see *Strophodonta punctulifera*.
- pustulosa*, syn. for *Productella truncata*.
- radiata*, see *Streptorhynchus radiatus*.
- recta*, see *Streptorhynchus rectus*.
- rectilateris*, syn. for *Strophodonta varistriata*.
- rhomboidalis*, Wahlenberg, 1821, Acta. Soc. Sci., Upsaliensis. This species ranges from the Trenton Group in the Lower Silurian to the Hamilton and Chemung Group, regarding *S. tenuistriata*, *S. depressa* and *S. rugosa* as varieties only. The type however is the Devonian form. [Sig. rhomboidal.]

- reticulata, Shaler, 1865, Bulletin No. 4, M. C. Z., Anticosti Gr. [Sig. reticulated.]
- rugosa, Dalman, 1827, (Leptæna rugosa) Vet. Acad. Handlinger, Niagara & Low. Held. Gr. This form is supposed to be the type of Rafinesque's genus Strophomena. The species is usually regarded as merely a variety of *S. rhomboidalis*. [Sig. wrinkled.]
- rugosa var. ventricosa, Hall, 1857, (*S. depressa* var. ventricosa) 10th Reg. Rep., Oriskany sandstone. [Sig. bulging-out.]
- setigera, see Chonetes setigera.
- semiovalis, Conrad, syn. for Leptæna sericea.
- semiovalis, Shaler. The name had been twice preoccupied.
- squamula, James, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Sig. a little scale.]
- striata, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Niagara Gr. [Sig. striated.]
- subdemissa, syn. for Strophodonta demissa.
- subplana, see Streptorhynchus subplanus.
- subtenta, see Streptorhynchus subtentus.
- syrtalis, syn. for Chonetes carinata.
- tenuilineata, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Trenton Gr. [Sig. slender-lined.]
- tenuistriata, Sowerby, 1839, (Leptæna tenuistriata) Murch. Sil. Syst., Low. Sil. [Sig. fine-lined.]
- textilis, see Strophodonta junia.
- thalia, Billings, 1860, Can. Nat. Geo., vol. 5, Trenton Gr. [Ety. mythological name.]
- transversalis, see Leptæna transversalis.
- trilobata, Owen, 1852, (Leptæna trilobata) Geo. Sur. Wis., Iowa & Minn., Trenton Gr. [Sig. three-lobed.]
- tullia, Billings, 1874, Pal. Foss., vol. 2, Low. Devonian. [Ety. proper name.]
- undulata, syn. for *S. rhomboidalis*.
- undulosa, Conrad, 1841, Ann. Rep. N. Y., Low. Held. Gr. [Sig. full of undulations.]
- unicostata, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Cin'ti Gr. [Sig. single-ribbed.]
- varistriata, see Strophodonta varistriata.
- ventricosa, Shaler, (Brachypriion ventricosum). The name was preoccupied.
- woolworthana, see Streptorhynchus woolworthanus.
- SYNTRIELASMA, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. [Ety. syn, together; treis, three; elasma, plate.]
- hemiplicatum, Hall, 1852, (Spirifera hemiplicata) Stan's. Ex. to Great Salt Lake, Coal Meas. [Sig. half-folded or plaited.]
- SYRINGOTHYRIS, Winchell, 1863, Proc. Acad. Nat. Sci. [Ety. syrinx, a pipe or channel; thyris, a small window or orifice.]
- halli, Winchell, 1863, Proc. Acad. Nat. Sci., Low. Carb. [Ety. proper name.]
- typus, Winchell, 1863, Proc. Acad. Nat. Sci. Phil., Low. Carb. [Ety. type of the genus.]
- TEREBRATULA, Llhwyd, 1696, Lith. Brit. Ichn. [Ety. diminutive of terebratus, perforated.]
- affinis, syn. for Atrypa reticularis.
- aprinis, see Rhynchonella aprinis.
- arcuata, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. bent or arched.] The name was preoccupied by Roemer in 1840.
- argentea, see Athyris argentea.
- aspera, see Atrypa aspera.
- bidentata, see Rhynchonella bidentata.
- bovidens, Morton, 1836, Am. Jour. Sci., vol. 29, Coal Meas. [Ety. bos, an ox; dens, a tooth.]
- brevirostris, see Rhynchonella brevirostris.
- brevilobata, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. short-lobed.]
- burlingtonensis, White, 1860, Bost. Jour. Nat. Hist., Kinderhook Gr. [Ety. proper name.]
- concentrica, syn. for Athyris spiriferoides.
- crenulata, Sowerby, 1840, (Atrypa crenulata) Geo. Trans., 2nd series, vol. 5, Devonian. [Sig. crenulated.]
- cuneata, see Rhynchonella cuneata.
- elia, Hall, 1867, Pal. N. Y., vol. 4, Up. Held. Gr. [Ety. proper name.]
- elongata, Schlotheim, 1817, Akad. Munich, vol. 6, Permian Gr. [Sig. elongated.]
- formosa, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. beautiful.]
- geniculosa, syn. for Terebratula bovidens.
- gracilis, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. slender.] The name was preoccupied by Von Buch in 1834.
- harmonia, Hall, 1867, Pal. N. Y., vol. 4, Cornif. Gr. [Ety. proper name.]
- inornata, McChesney, 1860, New Pal. Foss., Carb. [Sig. not ornamented.]
- insperata, Phillips, 1841, Pal. Foss., Devonian. [Sig. unexpected.]
- interplicata, see Rhynchonella interplicata.
- jucunda, Hall, 1867, Pal. N. Y., vol. 4, Up. Held. Gr. [Sig. welcome.]
- lens, Hall, 1860, 13th Reg. Rep., Cornif. Gr. [Sig. convex on both sides.]
- laticosta, see Atrypa laticosta.
- lincklani, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Ety. proper name.]
- lynx, see Orthis lynx.
- marcyi, see Retzia marcyi.
- marginalis, see Atrypa marginalis.
- micellini, see Orthis micellini.
- millepunctata, syn. for T. bovidens.
- mormoni, see Retzia mormoni.
- navicella, Hall, 1867, Pal. N. Y., vol. 4, Ham. Gr. [Sig. a little boat.]
- ontario, Hall, 1867, Pal. N. Y., vol. 4, Ham. Gr. [Ety. proper name.]

- ovoides*, see *Rensseleria ovoides*.  
*parva*, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. small.]  
 The name was preoccupied by d'Archiac in 1846.  
*perinflata*, Shumard, 1859, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. very much inflated.]  
*planirostra*, see *Cryptonella planirostra*.  
*rectirostra*, see *Cryptonella rectirostra*.  
*reticularis*, see *Atrypa reticularis*.  
*roemingeri*, Hall, 1863, 16th Reg. Rep., Ham. Gr. [Ety. proper name.]  
*sacculus*, Martin, 1809, Petrif. Derb., Low. Carb. [Sig. a little sack.]  
*schlotheimi*, see *Camerophoria schlotheimi*.  
*simulator*, Hall, 1867, Pal. N. Y., vol. 4, Ham. Gr. [Sig. an imitator.]  
*spiriferoides*, see *Athyris spiriferoides*.  
*subtilita*, see *Athyris subtilita*.  
*sullivanti*, Hall, Pal. N. Y., vol. 4, Up. Held. Gr. [Ety. proper name.]  
*traversensis*, Winchell, 1866, Rep. Low. Penin. Mich., Ham. Gr. [Ety. proper name.]  
*trinuclea*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. three-kerneled.]  
*turgida*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. swollen-out.]  
*uta*, see *Rhynchonella uta*.  
*wilsoni*, see *Rhynchonella wilsoni*.  
*Terebratulites*, Schlotheim, syn. for *Spirifera biforatus*, see *Orthis biforata*.  
**TREMATIS**, Sharpe, 1847, Quar. Jour. Geo. Soc., vol. 13. [Ety. *trema*, an opening.]  
*cælata*, see *Obolella cælata*.  
*cancellata*, Sowerby, 1825, (*Orbicula cancellata*) Zool. Jour., vol. 2, Trenton Gr. [Sig. cancellated.]  
*crassa*, see *Obolella crassa*.  
*dyeri*, S. A. Miller, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Ety. proper name.]  
*filosa*, see *Schizocrania filosa*.  
*huronensis*, Billings, 1862, Pal. Foss., vol. 1, Black Riv. Gr. [Ety. proper name.]  
*montrealensis*, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Ety. proper name.]  
*millepunctata*, Hall, 1866, Pamphlet, Cin'ti Gr. [Sig. many dotted.]  
*ottawaensis*, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Ety. proper name.]  
*pannulus*, White, 1874, Rep. on Invert. Foss., Potsdam Gr. [Sig. a small piece of cloth.]  
*punctostriata*, Hall, 1873, 23rd Reg. Rep., Trenton & Hud. Riv. Gr. [Sig. punctured and striated.]  
 (?) *pustulosa*, Hall, 1866, Pamphlet, Hud. Riv. Gr. [Sig. covered with pustules.]  
*rudis*, Hall, 1873, 23rd Reg. Rep., Trenton Gr. [Sig. rough.]  
*terminalis*, Emmons, 1842, (*Orbicula terminalis*) Geo. Rep. N. Y., Trenton Gr. [Sig. terminating.]  
**TREMATOSPIRA**, Hall, 1859, 12th Reg. Rep. [Ety. *trema*, foramen; *spira*, a spire; in allusion to the perforation in the beak of the ventral valve.]  
*acadie*, Hall, 1860, Can. Nat. & Geo., vol. 5, Up. Sil. [Ety. proper name.]  
*camura*, Hall, 1852, (*Atrypa camura*) Pal. N. Y., vol. 2, Low. Held. Gr. [Sig. an arch.]  
*costata*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. ribbed.]  
*deweyi*, see *Rhynchospira deweyi*.  
*formosa*, see *Rhynchospira formosa*.  
*gibbosa*, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. gibbous.]  
*globosa*, Hall, 1856, 9th Reg. Rep., (*Waldheimia globosa*) Low. Held. Gr. [Sig. globular.]  
*granulifera*, Meek, 1872, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Sig. bearing granules.]  
*hirsuta*, Hall, 1857, (*Atrypa hirsuta*) 10th Reg. Rep., Cornif. and Ham. Gr. [Sig. rough, hairy.]  
*imbricata*, Hall, 1857, 10th Reg. Rep., Low. Held. Gr. [Sig. like one upon another, as slates on a roof.]  
*mathewsoni*, McChesney, 1861, New Pal. Foss., Niagara Gr. [Ety. proper name.]  
*multistriata*, Hall, 1857, 10th Reg. Rep., Low. Held. Gr. [Sig. many-striated.]  
*liniuscula*, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. fine-lined.]  
 (?) *nobilis*, Hall, 1860, (*Rhynchospira nobilis*) 13th Reg. Rep., Ham. Gr. [Sig. remarkable, noted.]  
*perforata*, Hall, 1857, 10th Reg. Rep., Low. Held. Gr. [Sig. perforated.]  
 (?) *quadriplicata*, S. A. Miller, 1875, Cin. Quar. Jour. Sci., vol. 2, Cin'ti Gr. [Sig. four-plicated; in allusion to the four plications on the mesial fold.]  
*rectirostris*, Hall, 1856, (*Waldheimia rectirostra*) 9th Reg. Rep., Low. Held. Gr. [Sig. straight-beaked.]  
*simplex*, Hall, 1856, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. simple.]  
**TRIGONOTRETA**, Konig, 1825, Icon. Foss. Sect. [Ety. *trigonos*, a triangle; *tretos* perforated.] Subgenus of *Spirifera*.  
**TRIMERELLA**, Billings, 1862, Pal. Foss., vol. 1. [Ety. *treis*, three; *meros*, part; *ella*, diminutive.]  
*acuminata*, Billings, 1862, Pal. Foss., vol. 1, Guelph Gr. [Sig. sharp-pointed.]  
*billingsi*, Dall, 1871, Am. Jour. Conch., vol. 7, Guelph Gr. [Ety. proper name.]  
*dalli*, Davidson & King, 1872, Brighton Meeting Brit. Assoc., Guelph Gr. [Ety. proper name.]  
*galtensis*, Billings, 1862, (*Obolus galtensis*) Pal. Foss., vol. 1, Guelph Gr. [Ety. proper name.]  
*grandis*, Billings, 1862, Pal. Foss., vol. 1, Guelph Gr. [Sig. large.]

- minor*, syn. for *T. galtensis*.  
*ohioensis*, Meek, 1871, Am. Jour. Sci., 2nd series, vol. 1, Niagara Gr. [Ety. proper name.]  
*Triplesia*, Hall, Oct., 1858. *Camarella* has priority because it was published in August, 1858.  
*congesta*, see *Camarella congesta*.  
*cuspidata*, see *Camarella cuspidata*.  
*extans*, see *Camarella extans*.  
*nucleata*, see *Camarella nucleus*.  
*ortoni*, see *Camarella ortoni*.  
**TROPIDOLEPTUS**, Hall, 1857, proposed in 10th Reg. Rep., but described in 1859 in 12th Reg. Rep. [Ety. *tropis*, the keel or bottom of a ship; *leptos*, slender.]  
*carinatus*, Conrad, 1839, (*Strophomena carinata*) Ann. Geo. Rep. N. Y., Ham. Gr. [Sig. keeled.]  
*occidens*, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. western.]  
**VITULINA**, Hall, 1860, 13th Reg. Rep. [Ety. mythological name.]  
*pustulosa*, Hall, 1860, 13th Reg. Rep., Tully limestone. [Ety. covered with pustules; in allusion to the minute papillæ which cover the surface.]  
**WALDHEIMIA**, King, 1849, Monograph of Permian Fossils. [Ety. proper name.]  
*compacta*, White & St. John, 1868, Trans. Chi. Acad. Sci., Up. Coal Meas. [Sig. compact, pressed together.]  
*deweyi*, see *Rhynchospira deweyi*.  
*formosa*, see *Rhynchospira formosa*.  
*globosa*, see *Trematospira globosa*.  
*rectirostra*, see *Trematospira rectirostra*.  
**ZYGOSPIRA**, Hall, 1862, 15th Reg. Rep. N. Y. [Ety. *zygos*, a yoke; *spira*, a spire.]  
*headi*, Billings, 1862, (*Athyris headi*) Pal. Foss., vol. 1, Cin'ti & Hud. Riv. Gr. [Ety. proper name.]  
*headi* var. *anticostiensis*, Billings, 1862, (*Athyris headi* var. *anticostiensis*) Pal. Foss., vol. 1, Hud. Riv. Gr. [Ety. proper name.]  
*headi* var. *borealis*, Billings, 1862, (*Athyris headi* var. *borealis*) Pal. Foss., vol. 1, Hud. Riv. Gr. [Sig. northern.]  
*modesta*, Say, 1847, (*Atrypa modesta*) Pal. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Sig. not large.]  
*modesta* var. *cincinnatiensis*, James, Pal. Ohio, vol. 1, Cin'ti Gr. [Ety. proper name.]  
*paupera*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. impoverished, small.]  
*subconcava*, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Low. Held. Gr. [Sig. somewhat concave.]

# CLASS PTEROPODA.

FAMILY CONULARIIDÆ.—Conularia, Coleoprion.

FAMILY HYOLITHIDÆ.—Hyolithellus, Hyolithes, Pterotheca, Stenotheca, Theca.

INCERTÆ SEDIS.—Aspidella, Scenella, Tentaculites.

- ASPIDELLA, Billings, 1872, Am. Jour. Sci., 3rd series, vol. 3. [Ety. *aspidella*, a little shield.]
- terravnica, Billings, 1872, Am. Jour. Sci., 3rd series, vol. 3, Huronian Gr. [Ety. proper name.]
- Clioderna*, Hall, 1861, syn. for Pterotheca. *attenuata*, see Pterotheca attenuata. *expansa*, see Pterotheca expansa.
- COLEOPRION, Sandberger, 1847, Jahrbuch. [Ety. *koleos*, a sheath; *prion*, a saw.]
- tenuicinctum, Hall, 1876, Illust. Devonian Foss., Cornif. & Ham. Gr. [Sig. fine-girded.]
- CONULARIA, Miller, 1818, in Sowerby's Min. Conch., vol. 3. [Ety. *conulus*, a little cone.]
- asperata, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. rough.]
- byblis, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Chemung Gr. [Ety. mythological name.]
- cayuga, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Ety. proper name.]
- congregata, Hall, 1876, Illust. Devonian Foss., Portage Gr. [Sig. congregated together.]
- continens, Hall, 1876, Illust. Devonian Foss., Marcellus shale. [Sig. holding together.]
- crebristriata, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. from the crowded striae.]
- elegantula, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Cornif. Gr. [Sig. quite elegant.]
- gattingeri, Safford, 1869, Geo. of Tenn., Trenton Gr. [Ety. proper name.]
- gracilis, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. slender.]
- granulata, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. granulated.]
- hudsoni, Emmons, 1856, Am. Geo., Utica Gr. [Ety. proper name.]
- huntana, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- laqueata, Conrad, 1841, Ann. Rep. N. Y., Up. Held. Gr. [Sig. paneled.]
- lata, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. broad.]
- longa, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. long.]
- marionensis, Swallow, 1860, Trans. St. Louis Acad. Sci., Ham. Gr. [Ety. proper name.]
- miconema, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Waverly Gr. [Sig. small-threaded or lined.]
- missouriensis, Swallow, 1860, Trans. St. Louis Acad. Sci., St. Louis Gr. [Ety. proper name.]
- molaris, White, 1876, Proc. Acad. Nat. Sci., Devonian. [Sig. a grinder.]
- newberryi, Winchell, 1865, Proc. Acad. Nat. Sci., Wav. Gr. [Ety. proper name.]
- niagarensis, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Ety. proper name.]
- osagensis, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Ety. proper name.]
- papillata, Hall, 1847, Pal. N. Y., vol. 1, Tren. Gr. [Sig. covered with papilli.]
- planocostata, Dawson, 1868, Acad. Geol., Carb. [Sig. plain-ribbed.]
- pyramidalis, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. pyramidal.]
- quadrata, Walcott, 1876, Desc. New Sp. Foss., Trenton Gr. [Sig. quadrate.]
- quadrisculcata, (?) Miller, 1826, Min. Conch., Niagara Gr. [Sig. having four depressions.]
- splendida, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. splendid.]
- subcarbonaria, Meek & Worthen, 1873, Geo. Sur. Ill., vol. 5, Keokuk Gr. [Sig. in Lower Carboniferous rocks.]
- subulata, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. awl-shaped.]
- trentonensis, Hall, 1847, Pal. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Ety. proper name.]
- triplicata, Swallow, 1860, Trans. St. Louis Acad. Sci., Ham. Gr. [Sig. three-plicated.]
- undulata, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. wavy.]
- victa, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Sig. conquered, suppressed.]
- HYOLITHELLUS, Billings, 1871, Can. Nat. & Geol., vol. 6. [Ety. diminutive of *Hyolithes*.]
- micans, Billings, 1871, Can. Nat. & Geol., vol. 6, Potsdam Gr. [Sig. shining.]
- HYOLITHES, Eichwald.
- aclis, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. a small javelin.]
- americanus, Billings, 1871, (Theca triangularis, Hall) Can. Nat. & Geol., vol. 6, Pots. Gr. [Ety. proper name.]



- centennialis, Barrett, 1877, Ann. Lyc. Nat. Hist., vol. 11, Low. Held. Gr. [Ety. the one hundredth year, because the description was written in 1876.]
- communis, Billings, 1871, Can. Nat. & Geol., vol. 6, Potsdam Gr. [Sig. common.]
- emmonsii, Ford, 1873, Am. Jour. Sci., 3rd series, vol. 5, Potsdam Gr. [Ety. proper name.]
- excellens, Billings, 1874, Pal. Foss., vol. 2, Potsdam Gr. [Sig. excellent.]
- gibbosus, Hall, 1873, 23rd Reg. Rep. N. Y., Potsdam Gr. [Sig. gibbous.]
- impar, Ford, 1872, Am. Jour. Sci., 3rd series, vol. 3, Potsdam Gr. [Sig. unequal.]
- ligea, Hall, 1863, (Theca ligea) 15th Reg. Rep. N. Y., Up. Held. Gr. [Ety. mythological name.]
- micans*, see Hyolithellus micans.
- primordialis, Hall, 1861, (Theca primordialis) Geo. Rep. Wis., Potsdam Gr. [Sig. first in order.]
- princeps, Billings, 1871, Can. Nat. & Geol., vol. 6, Potsdam Gr. [Sig. primitive.]
- principalis, Hall, 1876, Illust. Devonian Foss., Schoharie Grit. [Sig. principal, large.]
- striatus, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. striated.]
- PTEROTHECA**, Salter, 1852, Rep. Brit. Ass'n. [Ety. *Pterotheca*, a winged *Theca*.]
- anatiformis, Hall, 1847, (Tellinomya anatiformis) Pal. N. Y., vol. 1, Trenton Gr. [Ety. like an *Anatifa*.]
- attenuata, Hall, 1861, (Clioderma attenuata) 14th Reg. Rep., Trenton Gr. [Sig. drawn out, attenuated.]
- canaliculata, Hall, 1861, 14th Reg. Rep., Trenton Gr. [Sig. channeled.]
- expansa, Emmons, 1842, (Delthyris expansus) Geo. Rep. N. Y., Black Riv. & Trenton Gr. [Sig. spread out.]
- saffordi, Hall, 1861, 14th Reg. Rep., Trenton Gr. [Ety. proper name.]
- transversa, Salter, 1852, Rep. Brit. Ass'n, Hud. Riv. Gr. [Sig. crosswise.]
- undulata, Hall, 1861, 14th Reg. Rep., Trenton Gr. [Sig. wavy.]
- Pugiunculus aculeatus*. see *Theca aculeata*.
- SCENELLA**, Billings, 1873, Can. Nat. & Geol. and Pal. Foss., vol. 2. [Ety. *scene*, a tent; *ella*, diminutive.]
- reticulata, Billings, 1873, Pal. Foss., vol. 2, Huronian Gr. [Sig. like net-work.]
- retusa, Ford, 1873, Am. Jour. Sci. & Arts, 3rd series, vol. 5, Low. Potsdam Gr. [Sig. blunted.]
- STENOTHECA**, Hicks, 1872, Quar. Jour. Geo. Soc. [Ety. *stenos*, narrow; *Theca*, a genus of Pteropods.]
- pauper, Billings, 1874, Pal. Foss. vol. 2, Huronian Gr. [Sig. impoverished.]
- TENTACULITES**, Schlotheim, 1820, Petrefacten. [Ety. *tentaculum*, a feeler; *lithos*, stone.]
- arenosus, Hall, 1876, Illust. Devon. Foss., Oriskany sandstone. [Sig. sandy.]
- attenuatus, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. attenuated.]
- bellulus, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. beautiful.]
- distans, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. distant.]
- elongatus, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. lengthened.]
- fissurella, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Marcellus shale. [Sig. a little cleft.]
- flexuosa*, see Conchicolites flexuosus.
- hoyti, White, 1876, Proc. Acad. Nat. Sci., Devonian. [Ety. proper name.]
- gyracanthus, Eaton, 1832, (Echinus gyracanthus) Geo. Text-book, Low. Held Gr. [Sig. round spine.]
- incurvus, Shumard, 1856, Geo. Rep. Mo., Trenton Gr. [Sig. incurved.]
- irregularis*, Hall, 1859, Pal. N. Y., vol. 3, syn. for Tentaculites gyracanthus.
- minutus, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Clinton Gr. [Sig. small.]
- niagarensis, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Ety. proper name.]
- ornatus, Sowerby, 1839, Murch. Sil. Syst., Water lime Gr. [Sig. adorned.]
- oswegoensis, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Ety. proper name.]
- richmondensis, S. A. Miller, 1874, Cin. Quar. Jour. Sci., Cin'ti Gr. [Ety. proper name.]
- scalariformis, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. like *T. scalaris*.]
- scalaris*, Schlotheim, 1820, Petref. t. 29, Cornif. Gr. [Sig. like a ladder.] Not an American species.
- sicula, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. a little dagger.]
- spicula, Hall, 1876, Illust. Devonian Foss., Chemung Gr. [Sig. a dart.]
- sterlingensis, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Ety. proper name.]
- subtilis, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. very slender.]
- tenuistriatus, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Sig. finely striated.]
- THECA**, Sowerby, 1845, Morris' Memoir Strezelski's N. S. Wales. [Ety. a sheath or case.]
- aculeata, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. sharpened.]
- gregaria, Meek & Hayden, 1861, Proc. Acad. Nat. Sci. Phil., Potsdam Gr. [Sig. occurring in masses.]
- ligea*, see Hyolithes ligea.
- parviuscula, Hall, 1862, Geo. Rep. Wis., Hud. Riv. Gr. [Sig. very small.]
- primordialis*, see Hyolithes primordialis.
- triangularis*, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. This name was preoccupied by Portlock in 1843. Billings described it as *Hyolithes americanus*.

# CLASS GASTEROPODA.

FAMILY BELLEROPHONTIDÆ.—Bellerophon, Bucania, Carinaropsis, Cyrtolites, Ecculiomphalus, Microceras, Phragmostoma, Porcellia, Tremanotus.

FAMILY CALYPTREIDÆ.—Capulus, Conchopeltis, Metoptoma, Palæacmæa, Platyceras, Trochita.

FAMILY CHITONIDÆ.—Chiton.

FAMILY DENTALIIDÆ.—Dentalium.

FAMILY HELICIDÆ.—Dawsonella, Pupa, Streptaxis, Zonites.

FAMILY LITTORINIDÆ.—Xenophora.

FAMILY MACLURÆIDÆ.—Maclurea.

FAMILY MURICIDÆ.—Fusispira.

FAMILY NATICIDÆ.—Naticopsis, Trachydomia.

FAMILY PLEUROTOMARIIDÆ.—Helicotoma, Microdoma, Murchisonia, Pleurotomaria, Raphistoma, Scalites.

FAMILY PYRAMIDELLIDÆ.—Aclis, Chemnitzia, Loxonema, Macrocheilus, Polyphe-  
mopsis, Soleniscus, Subulites.

FAMILY ROTELLIDÆ.—Anomphalus.

FAMILY SCALARIIDÆ.—Holopella.

FAMILY SOLARIDÆ.—Euomphalus, Ophileta, Phanerotinus, Platyschisma, Platys-  
toma, Straparollus, Straparollina, Strophostylus.

FAMILY TURBINIDÆ.—Clisospira, Cyclonema, Cyclora, Eunema, Holopea, Isonema,  
Orthonema, Orthostoma, Trochonema, Turbo.

FAMILY TURRITELLIDÆ.—Turritella.

*ACLIS*, Loven. [Ety. *a*, without; *kleis*, a  
projection.]

*minuta*, Stevens, 1858, Am. Jour. Sci.,  
vol. 25, Coal Meas. [Sig. minute.]

*robusta*, Stevens, 1858, Am. Jour. Sci.,  
vol. 25, Coal Meas. [Sig. robust.]

*swallowana*, Geinitz, 1866, (Turbonella  
*swallowana*) Carb. und Dyas in Neb.,  
Coal Meas. [Ety. proper name.]

*Acroculia*, Phillips, 1841, syn. for *Platyceras*.  
*angulata*, see *Platyceras angulata*.

*erecta*, see *Platyceras erecta*.

*ovalis*, see *Platyceras ovalis*.

*niagarensis*, see *Platyceras niagarensis*.

*trigonalis*, see *Platyceras trigonalis*.

*Ampullaria*, Lamarck, 1801, Syst. An. sans  
Vert. [Ety. *ampulla*, a flask.]

*helicoides*, see *Platyschisma helicoides*.

*ANOMPHALUS*, Meek & Worthen, 1866, Proc.  
Acad. Nat. Sci. [Ety. *Anomphalus*,  
without an umbilicus.]

*meeki*, see *Dawsonella meeki*.

*rotulus*, Meek & Worthen, 1866, Proc.  
Acad. Nat. Sci. Phil., Coal Meas. [Sig.  
a little wheel.]

*BELLEROPHON*, Montfort, 1808, Conch. Syst.,  
vol. 1. [Ety. mythological name.]

*acutilira*, Hall, 1862, 15th Reg. Rep.,  
Ham. Gr. [Sig. sharp-ridged.]

*acutus*, Sowerby, 1839, Murch. Sil. Syst.,  
Low. Silurian. [Sig. sharp.]

*allegoricus*, White, 1874, Rep. Invert.  
Foss., Quebec Gr. [Sig. allegorical.]  
*angustata*, see *Bucania angustata*.

*apertus*, Sowerby, 1825, Min. Conch., vol.  
5, Low. Carb. [Sig. an opening.]

*argo*, Billings, 1860, Can. Nat. & Geol.,  
vol. 5, Black Riv. & Trenton Gr.  
[Ety. mythological name.]

*auriculatus*, Hall, 1852, Pal. N. Y., vol. 2,  
Coralline limestone. [Sig. having ear-  
like appendages.]

*barquensis*, Winchell, 1862, Proc. Acad.  
Nat. Sci., Marshall Gr. [Ety. proper  
name.]

*bidorsatus*, see *Bucania bidorsata*.

*bilobatus*, Sowerby, 1839, Murch. Sil.  
Syst., Black Riv. to Mid. Sil. [Sig.  
two-lobed.]

- bilobatus var. acutus*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. sharp.]  
*bilobatus var. corrugatus*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. wrinkled.]  
*blaneyanus*, syn. for *B. carbonarius*.  
*bowmani*, White, 1876, Proc. Acad. Nat. Sci., Devonian. [Ety. proper name.]  
*brevilineatus*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Up. Sil. [Sig. short-lined.]  
*canadensis*, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Ety. proper name.]  
*cancellatus*, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. cancellated.]  
*cancellatus*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. The name was preoccupied.  
*carbonarius*, Cox, 1857, Geo. Rep. Ky., vol. 3, Coal Meas. [Sig. pertaining to the Coal Measures.]  
*carbonarius var. subpapillosus*, White, 1876, Geo. Uinta Mountains, Up. Aubrey Gr. [Sig. somewhat papillose.]  
*carinatus*, Sowerby, 1839, Murch. Sil. Syst., Devonian. [Sig. keeled.]  
*charon*, Billings, 1860, Can. Nat. & Geol. vol. 5, Black Riv. & Trenton Gr. [Ety. mythological name.]  
*convolutus*, Eaton, 1832, Geo. Text-book, Up. Sil. [Sig. spiral-whorled.]  
*crassus*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. thick.]  
*crenistris*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. having wrinkled lines.]  
*curvilineatus*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Onondaga, Schoharie and Up. Held. Gr. [Sig. having curved lines.]  
*cyrtolites*, Hall, 1860, 13th Reg. Rep., Kinderhook Gr. [Sig. curved stone.]  
*declivis*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Trenton Gr. [Sig. sloping.]  
*disculus*, Billings, 1860, Can. Nat. & Geo., vol. 5, Black Riv. & Trenton Gr. [Sig. a little disc.]  
*ellipticus*, McChesney, 1860, Desc. New Pal. Foss., Coal Meas. [Sig. elliptical.]  
*expansus*, Hall, 1847. The name was preoccupied by Sowerby. See *Bucania expansa*.  
*fraternus*, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. fraternal, allied to *B. expansus*.]  
*galeriiculatus*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. small capped.]  
*globosus*, Stevens, 1858, Am. Jour. Sci., vol. 25, Coal Meas. [Sig. globose.]  
*hiulcus*, Sowerby, Min. Conch. Not American.  
*kansasensis*, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]  
*leda*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Ety. mythological name.]  
*lineolatus*, Hall, 1860, 13th Reg. Rep., N. Y., Ham. Gr. [Sig. finely lined.]  
*lindsleyi*, Safford, 1869, Geo. of Tenn., Nashville Gr. [Ety. proper name.]  
*lyra*, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Sig. a lyre.]  
*macer*, Billings, 1865, Pal. Foss., vol. 1, Calciferous Gr. [Ety. proper name.]  
*mæra*, Hall, 1876, Illust. Devonian Foss., Chemung Gr. [Ety. mythological name.]  
*marcouanus*, Geinitz, 1866, Carb. und Dyas. in Neb., Coal Meas. [Ety. proper name.]  
*meekanus*, Swallow, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]  
*michiganensis*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. proper name.]  
*miser*, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. miserable.]  
*missouriensis*, Swallow, 1863, Trans. St. Louis Acad. Sci., Chester Gr. [Ety. proper name.]  
*mohri*, S. A. Miller, 1874, Cin. Quar. Jour. Sci., Cin'ti Gr. [Ety. proper name.]  
*montfortanus*, Norwood & Pratten, 1855, Jour. Acad. Nat. Sci., Coal Meas. [Ety. proper name.]  
*nashvillensis*, Troost, 1840, 5th Geo. Rep. Tenn., Low. Sil. [Ety. proper name.]  
*nautiloides*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. like a *nautilus*.]  
*neleus*, Hall & Whitfield, 1876, Illust. Devonian Foss., Chemung Gr. [Ety. mythological name.]  
*newberryi*, Meek, 1871, Proc. Acad. Nat. Sci., Corniferous Gr. [Ety. proper name.]  
*nodocarinatus*, Hall, 1858, Geo. Rep. Iowa, Coal Meas. [Sig. knotty and keeled.]  
*obsoletus*, Hall, 1876, Illust. Devonian Foss., Chemung Gr. [Sig. obsolete.]  
*otsego*, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Ety. proper name.]  
*palinurus*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
*panneus*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Chemung Gr. [Sig. ragged.]  
*patersoni*, Hall, 1862, Geo. Rep. Wis., Hud. Riv. Gr. [Ety. proper name.]  
*patulus*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Ham. Gr. [Sig. broad, spread out.]  
*pelops*, Hall, 1862, 15th Reg. Rep., Schoharie & Up. Held. Gr. [Ety. mythological name.]

- percarinatus*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. very strongly keeled.]
- perforatus*, syn. for *Tremanotus alpheus*.
- perlatus*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. very wide.]
- platystoma*, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Galena Gr. [Sig. broad-mouthed.]
- plenus*, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Sig. full, large.]
- profundus*, Emmons, Geo. Rep. N. Y., Trenton Gr. [Sig. deep.]
- propinquus*, Meek, 1871, Proc. Acad. Nat. Sci., Cornif. Gr. [Ety. from close resemblance to *B. neuberryi*.]
- punctifrons*, Emmons, 1842, Geo. Rep. N. Y., Black Riv. & Trenton Gr. [Sig. dotted in front.]
- rudis*, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Sig. rude, rough.]
- rugosiusculus*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. covered with small wrinkles.]
- scriptiferus*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Chemung Gr. [Ety. *scriptum*, writing; *fero*, to carry.]
- scissile*, Conrad, 1846, Proc. Acad. Nat. Sci., vol. 2, Carb. [Sig. cleft, rent.]
- solitarius*, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. alone, solitary.]
- stamineus*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Low. Carb. [Sig. thready.]
- stevensanus*, McChesney, 1860, Desc. New Pal. Foss., Coal Meas. [Ety. proper name.]
- striatus* (?), Sowerby, 1839, Murch. Sil. Syst., Portage Gr. The name was preoccupied by D'Orbigny.
- sublevis*, Hall, 1856, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. somewhat smooth.]
- sulcatinus*, see *Bucania sulcatina*.
- thalia*, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Ety. mythological name.]
- tricarinatus*, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. three-keeled.]
- tricarinata*, Hall, 1876, Illust. Devonian Foss., Chemung Gr. The name was preoccupied.
- troosti*, Safford, 1869, Geo. Rep. Tenn., Nashville Gr. [Ety. proper name.] This name was preoccupied by D'Orbigny in 1839.
- tuber*, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. a bump or knob.]
- urei*, Fleming, 1828, British Animals, Devonian. [Ety. proper name.] American species. (?)
- vittatus*, syn. for *B. carbonarius*.
- volutus*, Eaton, 1832, Geol. Text-book, Up. Sil. [Sig. whorled.]
- whittleseyi*, Winchell, 1865, Proc. Acad. Nat. Sci., Cuyahoga shale. [Ety. proper name.]
- BUCANELLA nana*, Meek, 1870, Proc. Am. Phil. Soc., vol. 11, Silurian. [Sig. dwarf fish.]
- BUCANIA*, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *bukane*, a trumpet.]
- angustata*, Hall, 1852, Pal. N. Y., vol. 2, Niagara & Guelph Gr. [Sig. narrowed or constricted.]
- bellipuncta*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. beautifully dotted.]
- bidorsata*, Hall, 1847, (Bellerophon *bidorsatus*) Pal. N. Y., vol. 1, Trenton Gr. [Sig. having a double back.]
- chicagoensis*, McChesney, 1860, New Pal. Foss., Niagara Gr. [Ety. proper name.]
- costata*, James, 1872, (Cyrtolites *costatus*) Am. Jour. Sci., 3rd ser., vol. 3, Cin'ti Gr. [Sig. ribbed, having prominent ridges.]
- crassolaris*, McChesney, 1861, New Pal. Foss., Niagara Gr. [Ety. *crassus*, thick.]
- devonica*, Hall, 1872, 24th Reg. Rep., Low. Held. Gr. [Ety. proper name.]
- expansa*, Hall, 1847, (Bellerophon *expansus*) Pal. N. Y., vol. 1, Trenton Gr. [Sig. widely-spread.]
- intexta*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. plaited, woven.]
- lirata*, Hall, 1862, Geo. Rep. Wis., Trenton Gr. [Sig. furrowed.]
- pervoluta*, McChesney, 1861, New Pal. Foss., Niagara Gr. [Sig. very much rolled.]
- profunda*, Conrad, 1841, Ann. Rep. N. Y., (Euomphalus *profundus*) Low. Held. Gr. [Sig. deep.]
- profunda*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. This name was preoccupied.
- punctifrons*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. dotted in front.]
- rotundata*, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. [Sig. rounded.]
- rugosa*, Emmons, 1856, Am. Geol., Utica Gr. [Sig. rugose.]
- stigmosa*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. full of marks.]
- sulcatina*, Emmons, 1842, (Bellerophon *sulcatinus*) Pal. N. Y., vol. 1, Chazy, Black Riv. & Trenton Gr. [Sig. small-furrowed.]
- trilobata*, Conrad, 1838, (Planorbis *trilobatus*) Ann. Rep. N. Y., Medina sandstone & Clinton Gr. [Sig. three-lobed.]
- Bulimella*, Hall, 1858, Trans. Alb. Inst., vol. 4. [Ety. a small *Bulimus*.] This name was preoccupied by Pfeiffer in 1852.
- bulimiformis*, see *Polyphemopsis bulimiformis*.
- canaliculata*, see *Polyphemopsis canaliculata*.
- elongata*, see *Polyphemopsis elongata*.

- CAPULUS**, Montfort, 1810, Conch. Syst., vol. 2. [Ety. *capulus*, a coffin.]  
*acutirostris*, Hall, 1856, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. sharp-beaked.]  
*auriformis*, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. [Sig. ear-shaped.]  
*parvus*, Swallow, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. small.]  
*triplicatus*, Swallow, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. three-plicated.]
- CARINAROPSIS**, Hall, 1847, Pal. N. Y., vol. 1, [Ety. from its resemblance to *Carinaria*.]  
*carinata*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. keeled or having ridges.]  
*orbiculata*, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. orbicular.]  
*patelliformis*, Hall, 1847, Pal. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Sig. patella or limpet-shaped.]
- CHEMNITZIA**, D'Orbigny, 1837, Mollusques, Echinodermes, Foraminiferes et Polypiers, etc. [Ety. proper name.]  
 Prof. Meek was of the opinion that the species referred to this genus from the palaeozoic rocks more properly belong to *Loxonema* and other genera.  
*attenuata*, Stevens, 1858, Am. Jour. Sci., vol. 25, Coal Meas. [Sig. drawn out, attenuated.]  
*parva*, Cox, 1857, Geo. Sur. Ky., vol. 3, Coal Meas. [Sig. small.]  
*swallowana*, Shumard, 1859, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]  
*tenuilineata*, Shumard, 1855, Geo. Rep. Mo., Chemung Gr. [Sig. fine lined.]
- CHITON**, Linnaeus, 1758, Syst. Nat., ed. 10. [Ety. *chiton*, a coat of mail.]  
*canadensis*, see *Metoptoma canadense*.  
*carbonarius*, Stevens, 1859, Am. Jour. Sci., vol. 25, Coal Meas. [Sig. from the Coal Measures.]  
*parvus*, Stevens, 1859, Am. Jour. Sci., vol. 25, Coal Meas. [Sig. small.]
- CLISOSPIRA**, Billings, 1865, Pal. Foss., vol. 1. [Ety. *kleio*, to lock; *spira*, a whorl.]  
*curiosa*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. curious.]
- CONCHOPELTIS**, Walcott, 1876, Desc. New Sp. Foss. [Ety. *conche*, shell; *pelte*, shield.]  
*alternata*, Walcott, 1876, Desc. New Sp. Foss., Trenton Gr. [Sig. alternate.]  
*minnesotensis*, Walcott, 1876, Desc. New Sp. Foss., Trenton Gr. [Ety. proper name.]
- CYCLONEMA**, Hall, 1852, Pal. N. Y., vol. 2, [Ety. *kuklos*, a circle; *nema*, a thread.]  
*bellulum*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. beautiful.]  
*bilix*, Conrad, 1842, (Pleurotomaria bilix) Jour. Acad. Nat. Sci., vol. 8, Trenton and Hud. Riv. Gr. [Sig. woven with a double thread.]  
*bilix var. conicum*, S. A. Miller, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Sig. conical.]  
*bilix var. fluctuatum*, James, 1874, (Cyclonema fluctuata) Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Sig. wavy.]  
*cancellatum*, Hall, 1843, (Littorina cancellata) Geo. Rep. 4th Dist. N. Y., Clinton Gr. [Sig. cancellated.]  
*commune*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. common.]  
*concinna*, Hall, 1876, Illust. Devonian Foss., Chemung Gr. [Sig. beautiful.]  
*crenistriatum*, Hall, 1876, Illust. Devonian Foss., Schoharie grit. [Sig. having wrinkled striae.]  
*crenulum*, Meek, 1871, Proc. Acad. Nat. Sci., Cornif. Gr. [Sig. crenulated.]  
*decorum*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. seemly.]  
*elevatum*, Hall, 1868, 20th Reg. Rep., Niagara Gr. [Sig. elevated.]  
*hageri*, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Ety. proper name.]  
*hallanum*, Salter, 1859, Can. Org. Rem., Decade 1, Black Riv. Gr. [Ety. proper name.]  
*hamiltoniae*, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Ety. proper name.]  
*humile*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. poor, small.]  
*liratum*, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Sig. furrowed.]  
*mediocre*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. ordinary, middling.]  
*montrealense*, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Ety. proper name.]  
*multiliratum*, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Sig. many-furrowed.]  
*obsoletum*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. obsolete, from the nearly obsolete spire.]  
*obsoleta*, Hall, 1876, Illust. Devonian Foss., Chemung Gr. The name was preoccupied.  
*percarinatum*, Hall, 1847, (Pleurotomaria percarinata) Pal. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Sig. very much carinated.]  
*percingulatum*, Billings, 1857, Rep. of Progr., Clinton & Niagara Gr. [Sig. encircled with many lines.]  
*phaedra*, Billings, 1865 Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
*pyramidatum*, James, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Sig. pyramidal.]  
*rugelineatum*, Hall, 1872, 24th Reg. Rep., Niagara Gr. [Sig. rugose-lined.]  
*semicarinatum*, Salter, 1859, Can. Org. Rem., Decade 1, Black Riv. Gr. [Sig. half-carinated.]  
*sulcatum*, Hall, 1852, Pal. N. Y., vol. 2, Guelph Gr. [Sig. furrowed.]

- tennesseense, Roemer, 1860, (Turbo tennesseensis) Sil. Fauna. des West Tenn., Niagara Gr. [Ety. proper name.]
- varians, Billings, 1857, Rep. of Progr., Mid. Sil. [Sig. variable.]
- varicosum, Hall, 1870, 24th Reg. Rep. N. Y. (Published by mistake in 14th Reg. Rep., 1861, as *C. ventricosa*) Cin'ti Gr. [Sig. having the threads or lines enlarged.]
- ventricosum, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. ventricose.]
- CYCLORA, Hall, 1845, Am. Jour. Sci., vol. 48. [Ety. *kuklos*, a circle.]
- hoffmanni, S. A. Miller, 1874, Cin. Quar. Jour. Sci., Cin'ti Gr. [Ety. proper name.]
- minuta, Hall, 1845, Am. Jour. Sci., vol. 48, Cin'ti Gr. [Sig. minute.]
- nana, syn. for *Cyclora minuta*.
- parvula, Hall, 1845, (Turbo parvula) Am. Jour. Sci., vol. 48, Cin'ti Gr. [Sig. very small.]
- Cyclostoma*, Lamarck, 1801, Syst. An. sans Vert. [Ety. *kuklos*, a circle; *stoma*, mouth.]
- pervetusta*, see *Pleurotomaria pervetusta*.
- CYRTOLITES, Conrad, 1838, Ann. Rep. N. Y. [Ety. *kurtos*, curved; *lithos*, stone.]
- carinatus, S. A. Miller, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Sig. keeled; from the ridges on the sides.]
- compressus, Conrad, 1838, (Phragmolites compressus) Ann. Rep. N. Y., Black Riv. & Trenton Gr. [Sig. compressed.]
- conradi, Hall, 1862, Geo. Rep. Wis., Trenton Gr. [Ety. proper name.]
- costatus*, see *Bucania costata*.
- cristatus, Safford, 1869, Geo. of Tenn., Nashville Gr. [Sig. crested.]
- desideratus, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. to be desired.]
- dyeri, Hall, 1871, Pamphlet, Cin'ti Gr. [Ety. proper name.]
- elegans, S. A. Miller, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Sig. elegant.]
- expansus, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. spread out.]
- filosus, Emmons, 1842, Geo. Rep. N. Y., Trenton Gr. [Sig. thready.]
- gillanus, White & St. John, 1868, Trans. Chi. Acad. Sci., Coal Meas. [Ety. proper name.]
- imbricatus, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Cin'ti Gr. [Sig. imbricated.]
- mitella, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Sig. a bandage.]
- ornatus, Conrad, 1838, Ann. Rep. N. Y., Hud. Riv. Gr. [Sig. ornamented.]
- pannosus, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. ragged.]
- pileolus, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Sig. a small cap.]
- sinuosus, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. wavy.]
- trentonensis, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Trenton Gr. [Ety. proper name.]
- DAWSONELLA, Bradley, 1874, Am. Jour. Sci., 3rd series, vol. 7. [Ety. proper name.]
- meeki, Bradley, 1872, (Anomphalus meeki) Am. Jour. Sci., 3rd series, vol. 4, Coal Meas. [Ety. proper name.]
- DENTALIUM, Linnæus, 1740, Syst. Nat., 2nd Ed. [Ety. *dens*, a tooth.]
- aciculatum, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. like a small needle.]
- annulostriatum, Meek & Worthen, 1870, Proc. Acad. Nat. Sci., Coal Meas. [Sig. annular and striated.]
- barquense, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. proper name.]
- canna, White, 1874, Rep. Invert. Foss., Carb. [Sig. a reed.]
- grandævum, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. very ancient.]
- meekianum, Geinitz, 1866, Carb. und Dyas in Neb., Coal Meas. [Ety. proper name.]
- missouriense, Swallow, 1863, Trans. St. Louis Acad. Sci., Chester Gr. [Ety. proper name.]
- obsoletum*, Hall, 1858, Geo. Rep. Iowa, Coal Meas. The name was preoccupied by Schlotheim in 1832.
- primarium, Hall, 1858, Geo. Rep. Iowa, Warsaw Gr. [Sig. primary.]
- venustum, Meek & Worthen, 1861, Proc. Acad. Nat. Sci., St. Louis Gr. [Sig. elegant.]
- ECCULIOMPHALUS, Portlock, 1843, Geol. Rep. Lond. [Ety. *ecculiomphalus*, unrolled umbilicus.]
- atlanticus, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]
- canadensis, Billings, 1861, Can. Nat. & Geol., Quebec Gr. [Ety. proper name.]
- distant, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. distant, standing apart.]
- intortus, Billings, 1861, Can. Nat. & Geol., Quebec Gr. [Sig. twisted, turned round.]
- spiralis, Billings, 1861, Can. Nat. & Geol., Quebec Gr. [Sig. spiral.]
- superbus, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. magnificent.]
- trentonensis, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Trenton Gr. [Ety. proper name.]
- undulatus, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Sig. undulating.]
- Eulima*, Risso, 1826, Histoire Naturelle des principales, etc. [Sig. ravenous hunger.]
- peracuta*, see *Polyphemopsis peracuta*.

- EUNEMA*, Salter, 1859, Can. Org. Rem., Decade 1. [Ety. *eu*, beautiful; *nema*, a line.]  
*cerithioides*, Salter, 1859, Can. Org. Rem., Decade 1, Black Riv. Gr. [Sig. like the genus *Cerithium*.]  
*erigone*, Billings, 1862, Pal. Foss., vol. 1, Black Riv. Gr. [Ety. mythological name.]  
*pagoda*, Salter, 1859, Can. Org. Rem., Decade 1, Black Riv. Gr. [Sig. an image of a supposed deity.]  
*priscum*, Billings, 1859, Can. Nat. & Geo., vol. 4, Corniferous Gr. [Sig. old or ancient.]  
*salteri*, see *Orthonema salteri*.  
*strigillatum*, Salter, 1859, Can. Org. Rem., Decade 1, Black Riv. Gr. [Sig. furrowed, fluted.]  
*trilineatum*, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Sig. three-lined.]  
*EUOMPHALUS*, Sowerby, 1814, Min. Conch., vol. 1. [Ety. *eu*, wide; *omphalos*, umbilicus.]  
*boonensis*, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Ety. proper name.]  
*catilloides*, Conrad, 1842, (Inachus catilloides) Jour. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. like *E. catillus*.] The name was preoccupied by Koenig in 1841.  
*clymenioides*, Hall, 1862, 15th Reg. Rep., Schoharie grit. [Sig. like a shell of the genus *Clymenia*.]  
*comes*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. an associate.]  
*conradi*, syn. for *Euomphalus decewi*.  
*cyclostomus*, Hall, 1858, Geo. Rep. Iowa, vol. 1, pt. 2, Ham. Gr. [Sig. having a circular mouth.]  
*decewi*, Billings, 1861, Can. Jour., Cornif. Gr. [Ety. proper name.]  
*depressus*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Low. Carb. The name was preoccupied by Goldfuss in 1832.  
*disjunctus*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. The name was preoccupied by Goldfuss.  
*eboracensis*, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Ety. proper name.]  
*exortivus*, Dawson, 1868, Acad. Geol., Carb. [Sig. eastern.]  
*expansus*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Up. Sil. [Sig. expanded.]  
*hecale*, Hall, 1876, Illust. Devonian Foss., Chemung Gr. [Ety. mythological name.]  
*hemispherica*, see *Platystoma hemisphericum*.  
*inops*, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. meagre.]  
*latus*, Hall, 1858, Geo. Rep. Iowa, Burlington Gr. [Sig. broad.]  
*laxus*, Hall, 1862, 15th Reg. Rep. N. Y., Cornif. & Ham. Gr. [Sig. loose.]  
*lens*, see *Straparollus lens*.  
*obtusum*, Hall, 1858, Geo. Rep. Iowa, Kinderhook Gr. [Sig. obtuse.]  
*perspectivus*, Swallow, 1863, Trans. St. Louis Acad. Sci., Kaskaskia Gr. [Sig. thoroughly viewed.]  
*pervetus*, Conrad, 1843, (Inachus pervetus) Proc. Acad. Nat. Sci., vol. 1, Trenton Gr. [Sig. very ancient.]  
*pervetustus*, Conrad, 1839, (Cyclostoma pervetusta) Ann. Rep. N. Y., Medina sandstone. [Sig. very ancient.]  
*planidorsatus*, see *Straparollus planidorsatus*.  
*planispira*, see *Straparollus planispiratus*.  
*planodiscus*, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. having a plane disc.]  
*profundus*, see *Bucania profunda*.  
*quadrivolvus*, see *Straparollus quadrivolvus*.  
*roberti*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Burlington Gr. [Ety. proper name.]  
*rotuliformis*, Meek, 1870, Proc. Acad. Nat. Sci., Calciferous Gr. [Sig. wheel-shaped.]  
*rotundus*, see *Pleurotomaria rotunda*.  
*rudis*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. rough.]  
*rugelineatus*, see *Cyclonema rugelineatum*.  
*rugosus*, see *Straparollus rugosus*.  
*sinuatus*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. wavy.]  
*spergenensis*, see *Straparollus spergenensis*.  
*spergenensis* var. *planorbiformis*, see *Straparollus spergenensis* var. *planorbiformis*.  
*spirorbis*, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. spiral-whorl.]  
*springvalensis*, White, 1876, Proc. Acad. Nat. Sci., Kinderhook Gr. [Ety. proper name.]  
*subplanus*, Hall, 1852, Stans. Ex. to Gt. Salt Lake, Coal Meas. [Sig. somewhat flat.]  
*sulcatus*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Onondaga Gr. [Sig. furrowed.]  
*tioga*, Hall, 1876, Illust. Devonian Foss., Chemung Gr. [Ety. proper name.]  
*triliratus*, Conrad, 1843, Proc. Acad. Nat. Sci., Trenton Gr. [Sig. three-lined.]  
*trochiscus*, Meek, 1870, Proc. Acad. Nat. Sci., Calciferous Gr. [Sig. wheel-shaped.]  
*umbilicatus*, see *Straparollus umbilicatus*.  
*uniangulatus*, see *Ophileta uniangulata*.  
*vaticinus*, Hall, 1863, 16th Reg. Rep. N. Y., Potsdam Gr. [Sig. prophetic.]  
*whitneyi*, see *Straparollus whitneyi*.  
*FUSISPIRA*, Hall, 1871, Pamphlet. [Ety. *fusus*, a spindle; *spira*, a spire.]  
*elongata*, Hall, 1871, Pamphlet, Trenton Gr. [Sig. lengthened, drawn out.]  
*subfusiformis*, Hall, 1847, (Murchisonia subfusiforme) Pal. N. Y., vol. 1, Trenton and Hud. Riv. Gr. [Sig. somewhat spindle-shaped.]  
*terebriiformis*, Hall, 1871, Pamphlet, Cin'ti Gr. [Sig. like an auger or piercer.]  
*ventricosa*, Hall, 1871, Pamphlet, Trenton Gr. [Sig. bulging out.]



- vittata, Hall, 1847, (Murchisonia vittata) Pal. N. Y., vol. 1, Trenton Gr. [Sig. banded.]
- Fusus*, Bruguiere, 1789, Encyc. Meth. [Ety. *fusus*, a spindle.] This genus is unknown in the palæozoic rocks.
- inhabilis*, see *Macrocheilus primigenius*.
- HELICOTOMA**, Salter, 1859, Can. Org. Rem., Decade 1. [Ety. *Helix*, a genus of shells; *tome*, a notch.]
- declivis*, Safford, 1869, Geo. of Tenn. Not defined.
- eucharis*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. beautiful.]
- gorgonea*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]
- larvata*, Salter, 1859, Can. Org. Rem., Decade 1, Black Riv. and Trenton Gr. [Sig. a ghost, masked.]
- miser*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. wretched.]
- muricata*, Salter, 1859, Can. Org. Rem., Decade 1, Black Riv. and Trenton Gr. [Sig. like the shell *Murex*.]
- perstriata*, Billings, 1859, Can. Nat. & Geo., vol. 4, Calciferous Gr. [Sig. very much striated.]
- planulata*, Salter, 1859, Decade 1, Black Riv. & Trenton Gr. [Sig. rather flat.]
- proserpina*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]
- serotina*, Nicholson, 1874, Rep. Pal. Ont. [Sig. backward.]
- spinosa*, Salter, 1859, Can. Org. Rem., Decade 1, Black Riv. Gr. [Sig. spiny, from the spines on the whorls.]
- tennesseensis*, Safford, 1869, Geo. of Tenn. Not defined.
- tritonia*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]
- HOLOPEA**, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *holos*, entire; *ope*, an aperture.]
- antiqua*, Vanuxem, 1843, (Littorina antiqua) Geo. Rep. 3rd Dist. N. Y., Low. Held. Gr. [Sig. ancient.]
- antiqua var. pervetusta*, Hall, 1859, Low. Held. Gr. [Sig. very ancient.]
- chicagoensis*, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Ety. proper name.]
- conica*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. conical.]
- danai*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- dilucula*, Hall, 1847, (Turbo dilucula) Pal. N. Y., vol. 1, Calciferous Gr. [Sig. very early, at break of day.]
- (?) *elongata*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. elongated.]
- eriensis*, Nicholson, 1874, Rep. Pal. Ont., Devonian. [Ety. proper name.]
- gracia*, Billings, 1862, Pal. Foss., vol. 1, Guelph Gr. [Sig. pleasant.]
- guelphensis*, Billings, 1862, Pal. Foss., vol. 1, Guelph Gr. [Ety. proper name.]
- harmonia*, Billings, 1862, Pal. Foss., vol. 1, Guelph Gr. [Ety. mythological name.]
- lavinia*, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Ety. mythological name.]
- leiosoma*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. smooth-bodied.]
- neréis*, Billings, 1862, Pal. Foss., vol. 1, Trenton & Black Riv. Gr. [Ety. mythological name.]
- niagarensis*, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Ety. proper name.]
- obliqua*, Hall, 1847, Pal. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Sig. oblique.]
- obscura*, Hall, 1847, (Turbo obscura) Pal. N. Y., vol. 1, Calciferous Gr. [Sig. obscure, doubtful.]
- occidentalis*, Nicholson, 1875, Quar. Jour. Geo. Soc. Lond., Guelph Gr. [Sig. western.]
- ophelia*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]
- ovalis*, Billings, 1859, Can. Nat. & Geo., vol. 4, Calciferous Gr. [Sig. oval.]
- paludiformis*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. like a *Paludina*.]
- proserpina*, Billings, 1862, Pal. Foss., vol. 1, Calciferous & Chazy Gr. [Ety. mythological name.]
- proutana*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]
- pyrene*, Billings, 1862, Pal. Foss., vol. 1, Black Riv. Gr. [Ety. mythological name.]
- reversa*, Hall, 1860, Can. Nat. & Geo., vol. 5, Silurian. [Sig. reversed.]
- subconica*, Hall, 1859, Can. Nat. & Geo., vol. 3, Low. Held. Gr. [Sig. subconical.]
- subconica*, Winchell, 1863. This name was preoccupied.]
- symmetrica*, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. Gr. [Sig. symmetrical.]
- turgida*, Hall, 1847, Pal. N. Y., vol. 1, Calciferous Gr. [Sig. turgid, swollen out.]
- ventricosa*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. bulging out.]
- HOLOPELLA**, McCoy, 1855, Brit. Pal. Foss. [Ety. diminutive of *Holopea*.]
- mira*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. wonderful.]
- Inachus catilloides*, see *Euomphalus catilloides*.
- pervetustus*, see *Euomphalus pervetustus*.
- undatus*, see *Lituites undatus*.
- ISONEMA**, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil. [Ety. *isos*, equal; *nema*, a thread.]
- bellatulum*, Hall, 1861, (Loxonema bellatula) 14th Reg. Rep. N. Y. [Sig. quite handsome.]
- depressum*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Ham. Gr. [Sig. depressed.]
- humilis*, see *Naticopsis humilis*.

- lichas*, Hall, 1861, (*Platyostoma lychas*) 14th Reg. Rep. N. Y., Up. Held. Gr. [Ety. mythological name.]  
*Littorina*, Ferussac, 1821, Tab. Syst. An. Mollusques, etc.  
*antiqua*, see *Holopea antiqua*.  
*cancellata*, see *Cyclonema cancellatum*.  
*wheeleri*, see *Naticopsis wheeleri*.  
**LOXONEMA**, Phillips, 1841, Pal. Foss. [Ety. *loxos*, oblique; *nema*, a thread.]  
*aculeatum*, Billings, 1866, Catal. Sil. Foss. Antic., *Anticosti* Gr. [Sig. sharp-pointed.]  
*acutum*, Dawson, 1868, Acad. Geol., Carboniferous. [Sig. somewhat sharp-pointed.]  
*attenuatum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. attenuated.]  
*bellatula*, see *Isonema bellatula*.  
*bellona*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Ety. proper name.]  
*boydi*, see *Murchisonia boydi*.  
*carinatum*, Stevens, 1858, Am. Jour. Sci., 2d series, vol. 25, Coal Meas. [Sig. keeled.]  
*cerithiiforme*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. like a shell of the genus *Cerithium*.]  
*coaptum*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. closely-joined.]  
*compactum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. compact.]  
*danvillense*, Stevens, 1858, Am. Jour. Sci., vol. 25, Coal Meas. [Ety. proper name.]  
*delphicola*, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Ety. mythological name.]  
*fasciatum*, King, 1850, Permian Foss., Permian Gr. [Sig. banded.]  
*fitchi*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]  
*halli*, Norwood & Pratten, 1855, Jour. Acad. Nat. Sci., 2d series, vol. 3, Coal Meas. [Ety. proper name.]  
*hamiltoniae*, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Ety. proper name.]  
*hydraulicum*, Hall, 1872, 24th Reg. Rep., Ham. Gr. [Ety. from the hydraulic limestone.]  
*inornata*, see *Polyphemopsis inornata*.  
*leda*, Hall, 1868, 20th Reg. Rep. N. Y., Niagara Gr. [Ety. mythological name.]  
*minutum*, Stevens, 1858, Am. Jour. Sci., 2d series, vol. 25, Coal Meas. [Sig. minute.]  
*multicostatum*, Meek & Worthen, 1861, Proc. Acad. Nat. Sci., Coal Meas. [Sig. many-ribbed.]  
*murrayanum*, Salter, 1859, Can. Org. Rem., Decade 1, Black Riv. Gr. [Ety. proper name.]  
*newberryi*, see *Macrocheilus newberryi*.  
*nexile*, Phillips, 1841, Pal. Foss., Ham. Gr. [Sig. interlaced.] American species. (?)  
*nitidula*, see *Polyphemopsis nitidula*.  
*nodosum*, Stevens, 1858, Am. Jour. Sci., 2d ser., vol. 25, Coal Meas. [Sig. knotted.]  
*obtusum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. obtuse.]  
*oligospiratum*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. having few whorls.]  
*pexatum*, Hall, 1861, 14th Reg. Rep., Up. Held. Gr. [Sig. clothed in a shell with a nap on it.]  
*pexatum var. obsoletum*, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. obsolete.]  
*planogyratum*, Hall, 1839, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. flattened whorl; from the flattening of the upper side of the last volution.]  
*politum*, Stevens, 1858, Am. Jour. Sci., 2d series, vol. 25, Coal Meas. [Sig. smoothed.]  
*regulare*, Cox, 1857, Geo. Sur. Ky., vol. 3, Coal Meas. [Sig. regular.]  
*robustum*, Hall, 1862, 15th Reg. Rep., Schoharie grit. [Sig. robust.]  
*rugosum*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. wrinkled.]  
*scitula*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. neat, pretty.]  
*semicostatum*, Meek, 1871, Proc. Aca. Nat. Sci., Coal Meas. [Sig. half-ribbed.]  
*solidum*, Hall, 1862, 15th Reg. Rep., Schoharie grit. [Sig. solid.]  
*styliola*, Hall, 1876, Illust. Devon. Foss., Chemung Gr. [Sig. a truncated column.]  
*subattenuatum*, Hall, 1862, 15th Reg. Rep., Schoharie grit. [Sig. somewhat attenuated.]  
*subulata*, see *Murchisonia subulata*.  
*tenuicarinatum*, Stevens, 1858, Am. Jour. Sci., 2d series, vol. 25, Coal Meas. [Sig. fine-lined.]  
*terebra*, Hall, 1876, Illust. Devon. Foss., Chemung Gr. [Sig. an auger.]  
*teres*, Hall, 1876, Illust. Devonian Foss., Corniferous Gr. [Sig. well-rounded.]  
*turritiforme*, Hall, 1860, 13th Reg. Rep. N. Y., Ham. Gr. [Sig. tower-like.]  
*vincta*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. girded.]  
*yandellianum*, Hall, 1858, Trans. Alb. Inst. vol. 4, Warsaw Gr. [Ety. proper name.]  
**MACLUREA**, LeSueur, 1818, (Macurites) Jour. Acad. Nat. Sci., vol. 1. [Ety. proper name.]  
*acuminata*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. pointed.]  
*affinis*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. near to.]  
*atlantica*, Billings, 1859, Can. Nat. & Geo., vol. 4, Chazy Gr. [Ety. proper name.]  
*bigsbii*, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Ety. proper name.]  
*crenulata*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. crenulated.]

- emmonsi, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
*labiata*, see *Raphistoma labiata*.  
*logani*, Salter, 1851, Rep. British Assoc., Black Riv. Gr. [Ety. proper name.]  
*magna*, LeSueur, 1818, Jour. Acad. Nat. Sci., vol. 1, Chazy Gr. [Sig. large.]  
*matutina*, Hall, 1847, Pal. N. Y., vol. 1, Calciferous Gr. [Sig. in the morning.]  
*oceanica*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
*ponderosa*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. heavy.]  
*psyche*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
*rotundata*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. rounded.]  
*speciosa*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. beautiful.]  
*sordida*, see *Ophileta sordida*.  
*striata*, Emmons, see *Raphistoma striata*.  
*striata*, Troost, 1840. Not defined.  
*sylpha*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
*transitionis*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. a passing over, or transition between *M. affinis* and *M. emmonsi*.]  
**MACROCHEILUS**, Phillips, 1841, Pal. Foss. [Ety. *macro*, long; *cheilos*, lip.]  
*altonensis*, Worthen, 1873, Geo. Sur. Ill., vol. 5, Coal Meas. [Ety. proper name.]  
*angulifera*, White, 1874, Rep. Invertebrate Foss., Carboniferous. [Sig. bearing angles.]  
*carinata*, Stevens, 1858, Am. Jour. Sci., vol. 25, Coal Meas. [Sig. keeled.]  
*cooperensis*, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Ety. proper name.]  
*fusiformis*, Hall, 1858, Geo. Rep. Iowa, Coal Meas. The name was preoccupied by Sowerby, see Morris' Catalogue.  
*gracilis*, Cox, 1857, Geo. Sur. Ky., vol. 3, Coal Meas. [Sig. slender.]  
*hallanus*, see *Soleniscus hallanus*.  
*hamiltoniae*, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Ety. proper name.]  
*hebe*, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Ety. mythological name.]  
*hildrethi*, Conrad, 1842, (*Plectostylus hildrethi*) Jour. Acad. Nat. Sci., vol. 8, Coal Meas. [Ety. proper name.]  
*inhabilis*, see *Macrocheilus primigenius*.  
*intercalaris*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. intercalated.]  
*kansasensis*, Swallow, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]  
*klipparti*, Meek, 1872, Proc. Acad. Nat. Sci., Coal Meas. [Ety. proper name.]  
*macrostomus*, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Sig. long-mouthed.]  
*medialis*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci., Coal Meas. [Sig. from its medium size.]  
*missouriensis*, Swallow, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]  
*newberryi*, Stevens, 1858, (*Loxonema newberryi*) Am. Jour. Sci., 2d series, vol. 25, Coal Meas. [Ety. proper name.]  
*paludinaeformis*, Hall, 1858, Geo. Rep. Iowa, Coal Meas. [Sig. like a shell of the genus *Paludina*.]  
*pinguis*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. fat, thick.]  
*ponderosus*, Swallow, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. heavy, bulky.]  
*primaeus*, Hall, 1876, Illust. Devonian Foss., Schoharie grit. [Sig. primeval.]  
*primigenius*, Conrad, 1835, (*Stylifer primigenia*) Trans. Geo. Soc. Penn., vol. 1, Coal Meas. [Sig. first born.]  
*pulchellus*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. beautiful.]  
*spiratus*, McCoy, 1850, Brit. Pal. Foss., Coal Meas. [Sig. spiral.]  
*texanus*, Shumard, 1859, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]  
*ventricosus*, Hall, 1858, Geo. Rep. Iowa, Coal Meas. [Sig. ventricose.]  
**METOPROMA**, Phillips, 1836, Geo. of Yorkshire. [Ety. *metopon*, front; *tome*, incision.]  
*alceste*, Billings, 1862, Pal. Foss., vol. 1, Hud. Riv. Gr. [Ety. mythological name.]  
*augusta*, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
*auomala*, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Sig. irregular.]  
*canadensis*, Billings, 1865, Geo. Pal. Foss., vol. 1, (*Chiton canadensis*) Black Riv. Gr. [Ety. proper name.]  
*dubia*, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. [Sig. doubtful.]  
*erato*, Billings, 1862, Pal. Foss., vol. 1, Black Riv. Gr. [Ety. mythological name.]  
*estella*, Billings, 1862, Pal. Foss., vol. 1, Hud. Riv. Gr. [Ety. proper name.]  
*eubele*, Billings, 1862, Pal. Foss., vol. 1, Calif. & Black Riv. Gr. [Ety. proper name.]  
*hyrie*, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
*instabilis*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. not firm, changing.]  
*melissa*, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
*montrealensis*, Billings, 1865, Pal. Foss., vol. 1, Chazy Gr. [Ety. proper name.]  
*niobe*, Billings, 1862, Pal. Foss., vol. 1, Calif. Gr. [Ety. mythological name.]  
*nycteis*, Billings, 1862, Pal. Foss., vol. 1, Calif. Gr. [Ety. mythological name.]

- orithyia, Billings, 1862, Pal. Foss., vol. 1, Calcif. Gr. [Ety. mythological name.]  
 orphyne, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
 quebecensis, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
 rugosa, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. wrinkled.]  
 simplex, Billings, 1865, Pal. Foss., vol. 1, Calcif. Gr. [Sig. simple.]  
 superba, Billings, 1865, Pal. Foss., vol. 1, Black Riv. Gr. [Sig. magnificent.]  
 trentonensis, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Ety. proper name.]  
 undata, Winchell, 1865, Proc. Acad. Nat. Sci. Phil., Kinderhook Gr. [Sig. wavy.]  
 umbella, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Burlington Gr. [Sig. umbrella-like.]  
 venilla, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
 MICRO CERAS, Hall, 1845, Am. Jour. Sci., vol. 48. [Ety. *mikros*, small; *keras*, horn.]  
 inornatus, Hall, 1845, Am. Jour. Sci., vol. 48, Cin'ti Gr. [Sig. not adorned, smooth.]  
 MICRODOMA, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. [Ety. *mikros*, small; *domus*, house.]  
 conica, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Low. Coal Meas. [Sig. conical.]  
 MURCHISONIA, D'Archiac & Verneuil, 1841, Bull. Soc. Geo. Fr., vol. 12. [Ety. proper name.]  
 abbreviata, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. The name was preoccupied by Koninek in 1841.  
 aciculata, Hall, 1860, Can. Nat. & Geo., vol. 5, Silurian. [Sig. needle-pointed.]  
 acrea, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
 ada, Billings, 1865, Pal. Foss., vol. 1, Calciferous Gr. [Ety. proper name.]  
 adelina, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
 agilis, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. from the depths.]  
 alexandra, Billings, 1865, Pal. Foss., vol. 1, Black Riv. Gr. [Ety. proper name.]  
 angulata, Phillips, 1836, (Rostellaria angulata) Geol. of Yorkshire, Devonian. [Sig. angulated.] Very doubtfully identified in America.  
 angustata, Hall, 1847, Pal. N. Y., vol. 1, Birdseye Gr. [Sig. narrowed.]  
 anna, Billings, 1859, Can. Nat. & Geol., vol. 4, Calciferous Gr. [Ety. St. Annis in Canada.]  
 archimedeia, McChesney, 1861, Desc. New Pal. Foss., Coal Meas. [Sig. pertaining to the machine invented by Archimedes.]  
 arenaria, Billings, 1859, Can. Nat. & Geo., vol. 4, Calciferous Gr. [Sig. sandy.]  
 arisaigensis, Hall, 1860, Can. Nat. & Geo., vol. 5, Silurian. [Ety. proper name.]  
 artemisia, Billings, 1865, Pal. Foss., vol. 1, Calciferous Gr. [Ety. proper name.]  
 aspera, Billings, 1859, Can. Nat. & Geo., vol. 4, Chazy Gr. [Sig. rough.]  
 attenuata, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. drawn out, attenuated.]  
 augustina, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
 bellicincta, Hall, 1847, Pal. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Sig. beautifully banded.]  
 bicincta, Hall, 1847, Pal. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Sig. double-banded.] This name was preoccupied by McCoy in 1844.  
 bilirata, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. double-furrowed.]  
 bivittata, Hall, 1852, Pal. N. Y., vol. 2, Guelph Gr. [Sig. double-banded.]  
 bowdeni, Safford, 1869, Geo. of Tenn., Nashville Gr. [Ety. proper name.]  
 boydi, Hall, 1843, (Loxonema boydi) Geo. Rep. 4th Dist. N. Y., Guelph Gr. [Ety. proper name.]  
 boylii, Nicholson, 1875, Quar. Jour. Geo. Soc. Lond., vol. 31, Guelph Gr. [Ety. proper name.]  
 carinifera, Shumard, 1863, Trans. St. Louis Acad. Sci., Calciferous Gr. [Sig. keel-bearing.]  
 cassandra, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
 catherina, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
 cicelia, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
 conoidea, Hall, 1852, Pal. N. Y., vol. 2, Medina Gr. [Sig. somewhat conical.]  
 conradi, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Ety. proper name.]  
 desiderata, Hall, 1862, 15th Reg. Rep., Up. Held. Gr. [Sig. desired.]  
 egregia, Billings, 1874, Pal. Foss., vol. 2, Up. Held. Gr. [Sig. excellent.]  
 elegantula, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. quite elegant.]  
 estella, Billings, 1862, Pal. Foss., vol. 1, Guelph Gr. [Ety. proper name.]  
 extenuata, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. thinned-out.]  
 funata, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. corded.]  
 gigantea, Billings, 1857, Rep. of Progr., Mid. Sil. [Sig. unusually large.]  
 gracilis, Hall, 1847, Pal. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Sig. slender.]  
 gypsea, Dawson, 1868, Acad. Geol., Carboniferous. [Sig. gypsum.]  
 hebe, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Ety. mythological name.]

helicteres, Salter, 1859, Can. Org. Rem., Decade 1, Black Riv. and Trenton Gr. [Sig. a round, smooth spire.]  
*hercynia*, Billings, 1862, Pal. Foss., vol. 1, Guelph Gr. [Ety. proper name.] The name was preoccupied by Roemer in 1843.  
*hermione*, Billings, 1862, Pal. Foss., vol. 1, Chazy or Black Riv. Gr. [Ety. mythological name.]  
*hyale*, Billings, 1862, Pal. Foss., vol. 1, Chazy or Black Riv. Gr. [Ety. proper name.]  
*infrequens*, Billings, 1859, Can. Nat. & Geol., vol. 4, Chazy Gr. [Sig. rare.]  
*inornata*, Meek & Worthen, 1866, Proc. Acad. Nat. Sci., Coal Meas. [Sig. not adorned.]  
*insculpta*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. engraved.]  
*jessica*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
*kansasensis*, Swallow, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]  
*laphami*, Hall, 1861, Rep. of Progr. Wis., Niagara Gr. [Ety. proper name.]  
*leda*, Hall, 1861, 14th Reg. Rep. N. Y., Up. Held. Gr. [Ety. mythological name.]  
*limitaris*, Hall, 1860, 13th Reg. Rep. N. Y., Ham. Gr. [Sig. limited.]  
*linearis*, Billings, 1859, Can. Nat. & Geol., vol. 4, Calceiferous Gr. [Sig. marked with lines.]  
*logani*, Hall, 1852, Pal. N. Y., vol. 2, Guelph Gr. [Ety. proper name.]  
*longispira*, Hall, 1852, Pal. N. Y., vol. 2, Guelph Gr. [Sig. long-spined.]  
*macrospira*, Hall, 1852, Pal. N. Y., vol. 2, Guelph Gr. [Sig. large or long-spined.]  
*maia*, Hall, 1861, 14th Reg. Rep., Up. Held. Gr. [Ety. mythological name.]  
*major*, Hall, 1851, Geo. Lake Sup. Land Dist., vol. 2, Trenton Gr. [Sig. the greater.]  
*melaniiformis*, Shumard, 1855, Geo. Rep. Mo., Calceiferous Gr. [Ety. formed like the *Melania*, a genus of shells.]  
*minima*, Swallow, 1858, Trans. St. Louis Acad. Sci., Middle Coal Meas. [Sig. the least.]  
*minuta*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. small.]  
*missisquoi*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
*modesta*, Billings, 1857, Rep. of Progr., Hud. Riv. Gr. [Sig. not large.]  
*mucro*, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. a sharp point.]  
*multivolvis*, Billings, 1857, Rep. of Progr., Hud. Riv. Gr. [Sig. many rolled.]  
*mylitta*, Billings, 1862, Pal. Foss., vol. 1, Guelph Gr. [Ety. proper name.]  
*nebrascensis*, Geinitz, 1866, Carb. und Dyas in Neb., Coal Meas. [Ety. proper name.]

*neglecta*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. neglected.]  
*obtusa*, Hall, 1852, Pal. N. Y., vol. 2, Coralline limestone. [Sig. obtuse.]  
*ozarkensis*, Shumard, 1863, Trans. St. Louis Acad. Sci., Calceiferous Gr. [Ety. proper name.]  
*papillosa*, Billings, 1857, Rep. of Progr., Mid. Sil. [Sig. covered with tubercles.]  
*perangulata*, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. and Trenton Gr. [Sig. very angular.]  
*perversa*, Swallow, 1858, Trans. St. Louis Acad. Sci., Up. Coal Meas. [Sig. turned around.]  
*petilla*, Hall, 1872, 24th Reg. Rep., Niagara Gr. [Sig. thin, slender.]  
*placida*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. placid, smooth.]  
*procris*, Billings, 1862, Pal. Foss., vol. 1, Black Riv. Gr. [Ety. mythological name.]  
*quadriceincta*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. four-girded.]  
*rugosa*, Billings, 1857, Rep. of Progr., Hud. Riv. Gr. [Sig. wrinkled.]  
*serrulata*, Salter, 1859, Can. Org. Rem., Decade 1, Black Riv. and Trenton Gr. [Sig. minutely-serrated.]  
*shumardana*, Winchell, 1863, Proc. Acad. Nat. Sci. Phil., Chemung Gr. [Ety. proper name.]  
*simulatrix*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. an imitator.]  
*sororcula*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. a little sister.]  
*subfusiformis*, see *Fusispira subfusiformis*.  
*subtemiata*, see *Orthonema subtemiata*.  
*subulata*, Conrad, 1842, (Loxonema subulata) Jour. Acad. Nat. Sci., vol. 8, Clinton Gr. [Sig. awl-shaped.]  
*summerensis*, Safford, 1869, Geo. of Tenn., Nashville Gr. [Ety. proper name.]  
*sylvia*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
*terebialis*, Hall, 1852, Pal. N. Y., vol. 2, Coralline limestone. [Sig. like an auger.]  
*terebriiformis*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. in the form of an auger or borer.]  
*teretiformis*, Billings, 1857, Rep. of Progr., Hud. Riv. Gr. [Sig. of a long, round shape.]  
*texana*, Shumard, 1860, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]  
*tricarinata*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. three-keeled.]  
*tricingulata*, Dawson, 1868, Acad. Geol., Carboniferous. [Sig. three-banded.]  
*turricula*, Billings, 1857, Rep. of Progr., Mid. Sil. [Sig. a little tower.]  
*turricula*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. This name was preoccupied.

- turritella, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. a little tower.]
- turritiformis, Hall, 1852, Pal. N. Y., vol. 2, Guelph Gr. [Sig. like a tower.]
- uniangulata, Hall, 1847, Pal. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Sig. having one angular line.]
- uniangulata *var.* abbreviata, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. comparatively shortened.]
- varians, Billings, 1857, Rep. of Progr., Hud. Riv. Gr. [Sig. variable.]
- varicosa, Hall, 1847, Pal. N. Y., vol. 1, Birdseye Gr. [Sig. varicose.]
- ventricosa, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. & Trenton Gr. [Sig. ventricose.]
- vermicula, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. worm-shaped.]
- vesta, Billings, 1862, Pal. Foss., vol. 1, Calciferous Gr. [Ety. mythological name.]
- vitellia, Billings, 1862, Pal. Foss., vol. 1, Guelph Gr. [Ety. proper name.]
- vittata, see *Fusispira vittata*.
- xanthippe, Billings, 1862, Pal. Foss., vol. 1, Guelph Gr. [Ety. proper name.]
- Natica*, Adanson, 1757, *Histoire Naturelle du Senegal*, etc. [Ety. *nato*, to swim with a fluctuating motion.] This genus is unknown in Palæozoic rocks.
- altonensis*, see *Naticopsis altonensis*.
- carleyana*, see *Naticopsis carleyana*.
- chesterensis*, see *Naticopsis chesterensis*.
- littonana*, see *Naticopsis littonana*.
- magister*, syn. for *Naticopsis ventricosa*.
- shumardi*, see *Naticopsis shumardi*.
- ventricosa*, see *Naticopsis ventricosa*.
- NATICOPSIS**, McCoy, 1844, Synop. Carb. Foss., Ireland. [Ety. from resemblance to the genus *Natica*.]
- requistriata*, Meek, 1873, Ohio Pal., vol. 1, Cornif. Gr. [Sig. having equal striae.]
- altonensis*, McChesney, 1865, (*Natica altonensis*) Desc. New Pal. Foss., Coal Meas. [Ety. proper name.]
- carleyana*, Hall, 1858, (*Natica carleyana*) Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]
- chesterensis*, Swallow, 1863, Trans. St. Louis Acad. Sci., Kaskaskia Gr. [Ety. proper name.]
- cretacea*, Hall, 1873, 23rd Reg. Rep. N. Y., Cornif. Gr. [Sig. chalk-like.]
- depressa*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. depressed.]
- dispassa*, Dawson, 1868, Acad. Geol., Carbonif. [Sig. much spread out.]
- gigantea*, Hall, 1873, 23rd Reg. Rep. N. Y., Chemung Gr. [Sig. unusually large.]
- hollidayi*, see *Trachydromia hollidayi*.
- howi*, Hartt, 1868, Acad. Geol., Carboniferous. [Ety. proper name.]
- humilis*, Meek, 1871, (*Isonema humilis*) Proc. Acad. Nat. Sci. Phil., Cornif. Gr. [Sig. small, dwarfish.]
- laevis*, Meek, 1871, Proc. Acad. Nat. Sci., Cornif. Gr. [Sig. smooth.]
- littonana*, Hall, 1858, (*Natica littonana*) Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]
- magister*, syn. for *N. ventricosa*.
- nana*, Meek & Worthen, 1860, (*Platystoma nana*) Proc. Acad. Nat. Sci., Coal Meas. [Sig. dwarfish.]
- nodosa*, see *Trachydromia nodosa*.
- pricei*, Shumard, 1858, Trans. St. Louis Acad. Sci., Up. Coal Meas. [Ety. proper name.]
- remex*, White, 1876, Geo. Uinta Mountains, Low. Aubrey Gr. [Sig. a rower.]
- shumardi*, McChesney, 1860, (*Natica shumardi*) Desc. New Pal. Foss., Coal Meas. [Ety. proper name.]
- subovata*, Worthen, 1873, Geo. Sur. Ill., vol. 5, Coal Meas. [Sig. somewhat ovate.]
- ventricosa*, Norwood & Pratten, 1855, (*Natica ventricosa*) Jour. Acad. Nat. Sci., Coal Meas. [Sig. ventricose.]
- wheeleri*, Swallow, 1860, (*Littorina wheeleri*) Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]
- Omphalotrochus*, Meek, 1864, Geo. California. A name proposed as a subgenus of *Euomphalus* or *Straparollus*.
- OPHILETA**, Vanuxem, 1842, Geo. Rep. N. Y. [Ety. *ophis*, a snake.]
- abditia*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. concealed.]
- (?) *bella*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. beautiful.]
- compacta*, Salter, 1859, Can. Org. Rem., Decade 1, Calciferous Gr. [Sig. compact.]
- complanata*, Vanuxem, 1842, Geo. Rep. N. Y., Calciferous Gr. [Sig. smoothed.]
- disjuncta*, Billings, 1865, Pal. Foss., vol. 1, Calciferous Gr. [Sig. disjoined.]
- levata*, Vanuxem, 1842, Geo. Rep. N. Y., Calciferous Gr. [Sig. polished, smoothed.]
- nerine*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]
- ottawaensis*, Billings, 1860, Can. Nat. & Geol., vol. 5, Trenton Gr. [Ety. mythological name.]
- owenana*, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Galena Gr. [Ety. proper name.]
- profunda*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. deep.]
- sordida*, Hall, 1847, (*Maclurea sordida*) Pal. N. Y., vol. 1, Calciferous Gr. [Sig. paltry.]
- uniangulata*, Hall, 1847, (*Euomphalus uniangulatus*) Pal. N. Y., vol. 1, Calcifer. Gr. [Sig. one angled; from the angular line on one whorl.]



- ORTHONEMA, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil. [Ety. *orthos*, straight; *nema*, a thread.]
- conicum, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. a cone.]
- newberryi, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Corniferous Gr. [Ety. proper name.]
- salteri, Meek & Worthen, 1860, (Eunema?) salteri Proc. Acad. Nat. Sci. Phil., Low. Coal Meas. [Ety. proper name.]
- subtæniatum, Geinitz, 1866, (Murchisonia subtænata) Carb. und Dyas in Neb., Coal Meas. [Sig. somewhat banded.]
- Orthynchia*, Hall, 1843, syn. for *Platyceras*.
- ORTHOSTOMA, Conrad, 1838, Ann. Rep. N. Y. [Ety. *orthos*, straight; *stoma*, mouth.]
- commune, Conrad, 1838, Ann. Rep. N. Y., figured in 1841, Birdseye Gr. [Sig. common.]
- PALÆACMÆA, Hall, 1873, 23d Reg. Rep. N. Y. [Ety. *palaos*, ancient; *Acmaea*, an existing genus of shells.]
- typica, Hall, 1873, 23d Reg. Rep. N. Y., Potsdam Gr. [Ety. type of the genus.]
- PHANEROTINUS, Sowerby, 1842, Min. Conch. [Ety. *phaneros*, aperture; *teino*, extended.]
- paradoxus, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. paradoxical.]
- Phragmolites*, syn. for *Cyrtolites*.  
*compressus*, see *Cyrtolites compressus*.
- PHRAGMOSTOMA, Hall, 1861, 14th Reg. Rep. [Ety. *phragmos*, a partition, *stoma*, the mouth; from the septum within the aperture.]
- cumulus, Hall, 1861, 14th Reg. Rep., Hud. Riv. Gr. [Sig. a heap.]
- cymbula, Hall, 1861, 14th Reg. Rep., Hud. Riv. Gr. [Sig. a small boat.]
- natator, Hall, 1862, 15th Reg. Rep., Portage and Ham. Gr. [Sig. a swimmer.] The same species Hall identified with *Bellerophon expansus* of Sowerby, in 1843, Geo. Rep. 4th Dist. N. Y.
- Pileopsis tubifer*, syn. for *Platyceras dumosum*.  
*vetustus*, Sowerby. Not American.
- Planorbis, Guettard, 1756, Mem. Acad. Sc. Paris.  
*trilobatus*, see *Bucania trilobatus*.
- PLATYCERAS, Conrad, 1840, Ann. Rep. N. Y. [Ety. *platys*, broad; *keras*, horn.]
- agreste, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. pertaining to the fields, coarse.]
- ammon, Hall, 1862, 15th Reg. Rep., Up. Held. Gr. [Ety. mythological name.]
- angulatum, Hall, 1852, (Acroculia angulata) Pal. N. Y., vol. 2, Clinton and Niagara Gr. [Sig. angulated.]
- arcuatum, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. bent.]
- argo, Hall, 1862, 15th Reg. Rep., Up. Held. Gr. [Ety. mythological name.]
- attenuatum, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Sig. attenuated.]
- attenuatum*, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Cornif. Gr. This name was preoccupied.]
- auriculatum, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. eared.]
- billingsi, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- biserialis, Hall, 1860, Supp. to Geo. Iowa, vol. 1, pt. 2, Burlington Gr. [Sig. having two rows.]
- bisinuatum, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. double-sinuated.]
- bisulcatum, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. double-furrowed.]
- bucculentum, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Sig. large mouthed.]
- calantica, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. like a covering for the head.]
- callosum, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. having a thick skin.]
- campanulatum, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Sig. bell-shaped.]
- capulus, Hall, 1860, Supp. Geo. Iowa, Burlington Gr. [Sig. a coffin.]
- carinatum, Hall, 1862, 15th Reg. Rep., Up. Held. Gr. [Sig. keeled.]
- cirriformis*, Conrad, 1841, Ann. Rep. N. Y. Not clearly defined.
- clavatum, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. club-like.]
- concavum, Hall, 1862, 15th Reg. Rep., Up. Held. Gr. [Sig. concave.]
- conicum, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Sig. conical.]
- corniforme, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. in the form of a horn.]
- crassum, Hall, 1862, 15th Reg. Rep., Up. Held. Gr. [Sig. thick.]
- curvirostrum, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. bent-beaked.]
- cymbium, Hall, 1862, 15th Reg. Rep., Up. Held. Gr. [Sig. a small drinking vessel.]
- cyrtolites, McChesney, 1859, Pal. Foss., Coal Meas. [Sig. curved stone.]
- dentalium, Hall, 1862, 15th Reg. Rep., Up. Held. Gr. [Sig. a plough share.]
- dilatatum, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. dilated.]
- dumosum, Conrad, 1840, Ann. Rep. N. Y., Up. Held. Gr. [Sig. bushy.]
- dumosum var. rarispinum*, Hall, 1862, 15th Reg. Rep., Up. Held. Gr. [Sig. few spined.]
- echinatum, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Sig. set with spines.]
- elongatum, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. lengthened.]



- equilateralis*, Hall, 1860, Supp. to vol. 1, pt. 2, Iowa Rep., Keokuk Gr. [Sig. equal-sided.]  
*erectum*, Hall, 1843, (*Acroculia erecta*) Geo. 4th Dist. N. Y., Cornif. & Ham. Gr. [Sig. erect, straight.]  
*expansus*, see *Strophostylus expansus*.  
*fissurella*, Hall, 1860, Supp. to Geo. Rep. Iowa, vol. 1, pt. 2, Keokuk Gr. [Sig. a little cleft.]  
*fornicatum*, Hall, 1862, 15th Reg. Rep., Up. Held. Gr. [Sig. arched.]  
*fornicatum var. contractum*, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. contracted.]  
*gebhardi*, Conrad, 1840, Ann. Rep. N. Y., Low. Held. and Oriskany Gr. [Ety. proper name.]  
*gibbosum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. gibbous.]  
*haliotoides*, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Kinderhook Gr. [Sig. like the *Haliotus* or ear-shell.]  
*incile*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. having gutters.]  
*infundibulum*, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. a funnel.]  
*intermedium*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. intermediate in size.]  
*lamellosum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. with many plates.]  
*lodiense*, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Waverly Gr. [Ety. proper name.]  
*magnificum*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. magnificent.]  
*multisinuatum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. having many depressions.]  
*multispinosum*, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Cornif. Gr. [Sig. having many spines.]  
*nebrascense*, Meek, 1872, Pal. E. Neb., Coal Meas. [Ety. proper name.]  
*newberryi*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]  
*niagarense*, Hall, 1852, (*Acroculia niagarenensis*) Pal. N. Y., vol. 2, Niagara Gr. [Ety. proper name.]  
*nodosum*, Conrad, 1841, Ann. Rep. N. Y., Oriskany sandstone. [Sig. knobbed.]  
*obesum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. plump in form.]  
*ovale*, Stevens, 1858, (*Acroculia ovalis*) Am. Jour. Sci., vol. 25, Carboniferous. [Sig. oval.]  
*patulum*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. spread out.]  
*pentalobus*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. five-lobed.]  
*perlutum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. very white.]  
*perplexum*, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. obscure.]  
*perplicatum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. very much plicated.]  
*pileiforme*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. cap-shaped.]  
*platystoma*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. broad-mouthed.]  
*platystoma var. alveatum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. channeled.]  
*plicatile*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. in small folds.]  
*plicatum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. folded.]  
*primævum*, Billings, 1871, Can. Nat. & Geol., vol. 6, Quebec Gr. [Sig. first-born.]  
*primordiale*, Hall, 1863, 16th Reg. Rep., Potsdam Gr. [Sig. the first of all.]  
*pyramidatum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. pyramid-formed.]  
*quincysense*, McChesney, 1861, New Pal. Foss., Burlington Gr. [Ety. proper name.]  
*reflexum*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. turned back.]  
*retrorsum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. turned backward.]  
*retrorsum var. abnorme*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. out of the usual order or form.]  
*reversum*, Hall, 1860, Supp. to Geo. Rep. Iowa, vol. 1, pt. 2, Burlington Gr. [Sig. turned or bent back.]  
*rictum*, Hall, 1862, 15th Reg. Rep., Ham. & Up. Held. Gr. [Sig. open-mouthed.]  
*robustum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. robust.]  
*senex*, Winchell & Marcy, 1865, (*Porcellia senex*) Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Sig. old, wrinkled.]  
*sinuatum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. marked with depressions.]  
*spinigerum*, Worthen, 1873, Geo. Sur. Ill., vol. 5, Coal Meas. [Sig. spine-bearing.]  
*spirale*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. spiral.]  
*subnodosum*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. somewhat knotty, or marked with short projections.]  
*subplicatum*, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Kinderhook Gr. [Sig. somewhat folded.]  
*subrectum*, Hall, 1859, 12th Reg. Rep. N. Y., Up. Held. Gr. [Sig. somewhat straight.]  
*subrectum*, Hall, 1860, Supp. to Iowa Rep. The name being preoccupied, Meek & Worthen proposed *P. infundibulum*.  
*subundatum*, Conrad, 1841, Ann. Rep. N. Y., Up. Held. Gr. [Sig. somewhat waved.]

- subundatum*, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Low. Held. Gr. The name was preoccupied.
- sulcatum*, Conrad, 1841, Ann. Rep. N. Y., Oriskany sandstone. [Sig. furrowed.]
- sulcoplicatum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. thrown up in plications.]
- symmetricum*, Hall, 1862, 15th Reg. Rep., Ham. & Up. Held. Gr. [Sig. symmetrical.]
- tenuiliratum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. fine-lined.]
- thetis*, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Ety. mythological name.]
- thetis var. subspinosa*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. somewhat spiny.]
- tortum*, Meek, 1871, Proc. Acad. Nat. Sci., Coal Meas. [Sig. twisted.]
- tortuosum*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. very much twisted.]
- trigonale*, Stevens, 1858, (Acroculia trigonalis) Am. Jour. Sci. & Arts, vol. 25, Carboniferous. [Sig. triangular.]
- trilobatum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. three-lobed.]
- tubiforme*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. trumpet-shaped.]
- uncum*, Meek & Worthen, 1866, Proc. Acad. Nat. Sci., Keokuk Gr. [Sig. crooked, hooked.]
- undatum*, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. wavy.]
- undulostriatum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. having waved striae.]
- unguiforme*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. claw-shaped.]
- uniseriale*, Nicholson, 1874, Rep. Pal. Ont., Devonian. [Sig. having a single row or series.]
- unisulcatum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. one-furrowed.]
- ventricosum*, Conrad, 1840, Ann. Rep. N. Y., Low. Held. Gr. [Sig. bulging out.]
- vomerium*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. a plow share.]
- PLATYSTOMA**, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8. [Ety. *platys*, broad; *stoma*, mouth.]
- affine*, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Sig. related to.]
- aplata*, Hall, 1876, Illust. Devonian Foss., Schoharie grit. [Sig. without lines.]
- arenosum*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Low. Held. Gr. [Sig. sandy.]
- defiguratum*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. disfigured.]
- depressum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. depressed.]
- euomphaloides*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. like a shell of the genus *Euomphalus*.]
- hemisphericum*, Hall, 1843, (Euomphalus hemispherica) Geo. Rep. 4th Dist. N. Y., Niagara Gr. [Sig. hemispherical.]
- lichas*, see *Isonema lichas*.
- lineatum*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Cornif. Gr. [Sig. lined.]
- lineatum*, Hall, 1862, 15th Reg. Rep. The name was preoccupied.
- lineatum var. amplum*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. full, large.]
- lineatum var. callosum*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. thick, hard.]
- lineatum var. sinuosum*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. wavy, sinuous.]
- nana*, see *Naticopsis nana*.
- niagarensis*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Ety. proper name.]
- peoriense*, McChesney, 1860, Desc. New Pal. Foss., Up. Coal Meas. [Ety. proper name.]
- plebeium*, Hall, 1876, 28th Reg. Rep. N. Y., Niagara Gr. [Sig. common.]
- pleurotoma*, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. from the genus *Pleurotoma*.]
- strophium*, Hall, 1862, 15th Reg. Rep., Cornif. Gr. [Sig. twisted or turned.]
- subangulatum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. somewhat angular.]
- trigonostoma*, Meek, 1871, Proc. Acad. Nat. Sci., Niagara Gr. [Sig. triangular-mouthed.]
- tumida*, see *Pleurotomaria tumida*.
- turbinatum*, Hall, 1861, 14th Reg. Rep., Up. Held. Gr. [Sig. cone-shaped.]
- turbinatum var. cochleatum*, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. spiral-formed.]
- unisulcatum*, Conrad, 1842, (Pleurotomaria unisulcata) Jour. Acad. Nat. Sci., vol. 8, Up. Held. Gr. [Sig. having one depression.]
- ventricosum*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Low. Held. Gr. [Sig. ventricose.]
- PLATYSCHISMA**, McCoy, 1844, Syn. Carb. Foss., Ireland. [Ety. *platys*, wide; *schisma*, a slit.]
- dubium*, Dawson, 1868, Acad. Geol., Carboniferous. [Sig. doubtful.]
- helicoides*, (?) Sowerby, 1829, (Ampularia helicoides) Min. Conch., vol. 8, Coal Meas. [Sig. resembling a shell of the genus *Helix*.]
- Plectostylus*, Conrad, 1842, Syn. for *Macrocheilus*.
- hildrethi*, see *Macrocheilus hildrethi*.
- PLEUROTOMARIA**, DeFrance, 1826, Dict. Sci. Nat., 41. [Ety. *Pleura*, side; *tome*, cut or notch.]
- abrupta*, Billings, 1859, Can. Nat. & Geo., vol. 4, Calciferous Gr. [Sig. terminating suddenly.]

- advena*, Winchell, 1864, Am. Jour. Sci. & Arts, 2d series, vol. 37. Potsdam Gr. [Sig. a stranger.]
- agarista*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]
- agave*, Billings, 1865, Pal. Foss., vol. 1, Trenton Gr. [Ety. mythological name.]
- ambigua*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. doubtful.]
- americana*, Billings, 1860, Can. Nat. & Geo., vol. 5, Trenton Gr. [Ety. proper name.]
- amphitrite*, Billings, 1862, Pal. Foss., vol. 1, Chazy or Black Riv. Gr. [Ety. mythological name.]
- angulata*, Conrad, 1843, Proc. Acad. Nat. Sci. Phil. This name was preoccupied by Sowerby.
- antiquata*, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. [Sig. antiquated.]
- aperta*, see *Raphistoma apertum*.
- apicalis*, Hall, 1876, Illust. Devonian Foss., Chemung Gr. [Sig. apical.]
- arabella*, Billings, 1865, Pal. Foss., vol. 1, Calciferous Gr. [Ety. proper name.]
- arachne*, Billings, 1862, Pal. Foss., vol. 1, Black Riv. Gr. [Ety. mythological name.]
- arata*, Hall, 1862, 15th Reg. Rep., Schoharie grit. [Sig. furrowed.]
- axion*, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Sig. furrowed.]
- beckwithana*, McChesney, 1860, Desc. New Pal. Foss., Coal Meas. [Ety. proper name.]
- biangulata*, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. [Sig. double-angled, from the two angular elevations on each whorl.]
- bicarinata*, McChesney, 1860. This name was preoccupied and the species is now called *P. turbiniformis*.
- bilix*, see *Cyclonema bilix*.
- bispiralis*, Hall, 1852, Pal. N. Y., vol. 2, Guelph Gr. [Sig. two-whorled.]
- bonharborensis*, Cox, 1857, Geo. Sur. Ky., vol. 3, Coal Meas. [Ety. proper name.]
- brazoensis*, Shumard, 1860, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]
- calcifera*, Billings, 1859, Can. Nat. & Geo., Calciferous Gr. [Ety. from the Calciferous Group.]
- calphurnia*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]
- calyx*, Billings, 1859, Can. Nat. & Geo., vol. 4, Chazy Gr. [Sig. a cup.]
- canadensis*, Billings, 1865, Pal. Foss., vol. 1, Calciferous Gr. [Ety. proper name.]
- capillaria*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. pertaining to hair.]
- carbonaria*, Norwood & Pratten, 1855, Jour. Acad. Nat. Sci., 2d series, vol. 3, Coal Meas. [Sig. pertaining to coal.]
- casii*, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Niagara Gr. [Ety. proper name.]
- cavumbilicata*, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. having a hollow umbilicus.]
- chesterensis*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci., Chester Gr. [Ety. proper name.]
- chesterensis*, Swallow, 1863, Trans. St. Louis Acad. Sci., Chester Gr. The name was preoccupied.
- circe*, Billings, 1857, Rep. of Progr., Hud. Riv. Gr. [Ety. mythological name.]
- concava*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. The name was preoccupied by Deshayes in 1824-'36.
- conoides*, Meek & Worthen, 1866, Proc. Acad. Nat. Sci., Coal Meas. The name was preoccupied by Deshayes in 1831.
- conulus*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. a little cone.]
- coronula*, syn. for *P. sphaerulata*.
- coxana*, Meek & Worthen, 1866, Proc. Acad. Nat. Sci., Coal Meas. [Ety. proper name.]
- crevieri*, Billings, 1859, Can. Nat. & Geol., vol. 4, Chazy Gr. [Ety. proper name.]
- cryptata*, Billings, 1866, Catal. Sil. Foss., Antic., Anticosti Gr. [Sig. concealed.]
- cyclonemoides*, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Niagara Gr. [Sig. like a *Cyclonema*.]
- deiopea*, Billings, 1862, Pal. Foss., vol. 1, Guelph Gr. [Ety. mythological name.]
- delia*, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Ety. mythological name.]
- delicatula*, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. very delicate.]
- delphinuloides*, Goldfuss, as identified by d'Archiac & Verneuil. Not American.
- depauperata*, Hall, 1862, Geo. Rep. Wis., Hud. Riv. Gr. [Sig. impoverished.]
- depressa*, Cox, 1857, Geo. Sur. Ky., vol. 3, Coal Meas. The name was preoccupied by Passy in 1832, by Phillips in 1836, and by Koninek in 1841.
- disjuncta*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. disjointed.]
- dispersa*, Dawson, 1868, Acad. Geol., Carboniferous. [Sig. dispersed.]
- docens*, Billings, 1859, Can. Nat. & Geol., vol. 4, Chazy Gr. [Sig. teaching.]
- doris*, Hall, 1862, 15th Reg. Rep., Schoharie & Cornif. Gr. [Ety. mythological name.]
- dryope*, Billings, 1865, Pal. Foss., vol. 1, Black Riv. Gr. [Ety. mythological name.]
- ella*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Ety. proper name.]

- elora, Billings, 1862, Pal. Foss., vol. 1, Guelph Gr. [Ety. proper name.]
- emmetensis, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Ety. proper name.]
- estella, Hall, 1872, 24th Reg. Rep., Up. Held. Gr. [Ety. proper name.]
- etna, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]
- eugenia, Billings, 1862, Pal. Foss., vol. 1, Black Riv. Gr. [Ety. proper name.]
- euomphaloides, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Sig. like an *Euomphalus*.]
- exigua, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. small, scanty.]
- filitexta, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. woven like threads.]
- galtensis, Billings, 1862, Pal. Foss., vol. 1, Guelph Gr. [Ety. proper name.]
- glandula, Shumard, 1860, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. a little kernel.]
- gonopleura, Winchell & Marcy, 1865, Bost. Soc. Nat. Hist., Niagara Gr. [Sig. having an angular rib.]
- granulostriata, Meek & Worthen, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. granular and striated.]
- grayvillensis, Norwood & Pratten, 1855, Jour. Acad. Nat. Sci., 2nd series, vol. 3, Coal Meas. [Ety. proper name.]
- gregaria, Billings, 1859, Can. Nat. & Geo., vol. 4, Calciferos Gr. [Sig. occurring in masses.]
- halei, Hall, 1861, Rep. of Progr. Wis. Sur., Niagara Gr. [Ety. proper name.]
- hallana, Shumard, 1859, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- halli, S. A. Miller, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Ety. proper name.]
- harpya, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]
- haydenana, Geinitz, 1866, Carb. und Dyas in Neb., Coal Meas. [Ety. proper name.]
- hebe, Hall, 1861, 14th Reg. Rep. N. Y., Up. Held. Gr. [Ety. mythological name.]
- helena, Billings, 1860, Can. Nat. & Geo., vol. 5, Hud. Riv. Gr. [Ety. proper name.]
- hickmanensis, Winchell, Geo. of Tenn., Low. Carb. [Ety. proper name.]
- hortensia, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]
- hoyi, Hall, 1861, Rep. of Progr. Wis. Sur., Niagara Gr. [Ety. proper name.]
- humerosa, Meek & Hayden, 1858, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. humped.]
- humilis, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. small.]
- humilis, Winchell, 1862. This name was preoccupied.
- huronensis, Winchell, 1862, Proc. Acad. Nat. Sci. Phil., Portage Gr. [Ety. proper name.]
- hyale, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]
- ida, Hall, 1861, Rep. of Progr. Wis. Sur., Niagara Gr. [Ety. mythological name.]
- ignobilis, Dawson, 1868, Acad. Geol., Carboniferous. [Sig. ignoble.]
- imitator, Hall, 1872, 24th Reg. Rep., Up. Held. Gr. [Sig. resembler.]
- immatura, Billings, 1859, Can. Nat. & Geo., vol. 4, Chazy Gr. [Sig. immature.]
- indenta, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. notched.]
- inexpectans, Hall & Whitfield, 1875, Ohio Pal., vol. 1, Clinton Gr. [Sig. not expected.]
- inornata, Meek, 1872, Pal. E. Neb., Coal Meas. [Sig. not adorned.]
- insolita, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. rare.]
- isaacsi, Hall, 1873, 23rd Reg. Rep., Che-mung Gr. [Ety. proper name.]
- itys, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Ety. mythological name.]
- kearneyi, Hall, 1861, 12th Reg. Rep., Up. Held. Gr. [Ety. proper name.]
- labrosa, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. having lips.]
- lapidica*, see *Raphistoma lapidicum*.
- laurentina, Billings, 1859, Can. Nat. & Geo., vol. 4, Calcif. Gr. [Ety. proper name.]
- leavenworthana, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]
- lenticularis*, see *Raphistoma lenticulare*.
- lineata, Hall, 1843, (Turbo lineatus) Geo. Rep. 4th Dist. N. Y. This name was preoccupied, and the fossil is now called *P. itys*.
- litorea, Hall, 1852, Pal. N. Y., vol. 2, Medina sandstone. [Sig. on the shore.]
- lucina, Hall, 1862, 15th Reg. Rep., Cornif. Gr. [Ety. proper name.]
- lucina var. *perfasciata*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. much banded.]
- lydia, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Ety. proper name.]
- marcouana, Geinitz, 1866, Carb. und Dyas in Neb., Coal Meas. [Ety. proper name.]
- meekana, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]
- micula, Hall, 1862, Geo. Rep. Wis., Hud. Riv. Gr. [Sig. very small.]
- miser, Billings, 1859, Can. Nat. & Geo., vol. 4, Calcif. Gr. [Sig. paltry.]
- missisquoi, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]
- missouriensis, Swallow, 1860, (Trochus missouriensis) Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]
- mitigata, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. lessened.]

- muralis*, Owen, 1852, Geo. Sur. Wis., Iowa & Minn., Calciferous Gr. [Sig. mural.]  
*nasoni*, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Ety. proper name.]  
*niota*, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Ety. proper name.]  
*nodomarginata*, McChesney, 1860, Desc. New Pal. Foss., Ham. Gr. [Sig. having a nodose margin.]  
*nodulosa*, Hall, 1847, Pal. N. Y., vol. 1. The name was preoccupied by Sandberger in 1842, and by King in 1844.  
*nodulostriata*, Hall, 1848, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. nodulose and striated.]  
*normani*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
*nucleolata*, Hall, 1847, Pal. N. Y., vol. 1, Birdseye Gr. [Sig. like a little nut.]  
*numeria*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]  
*obsoleta*, Hall, 1847, Pal. N. Y., vol. 1, Birdseye Gr. [Sig. obsolete.]  
*obtusispira*, Shumard, 1859, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. having a blunt spire.]  
*occidens*, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Sig. western.]  
*parvispira*, Winchell, 1862, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. having a small spire.]  
*pauper*, Billings, 1859, Can. Nat. & Geol., vol. 4, Chazy Gr. [Sig. poor.]  
*pauper*, Hall, 1865, 20th Reg. Rep. The name was preoccupied.  
*percarinata*, see *Cyclonema percarinatum*.  
*perhumerosa*, Meek, 1872, Pal. E. Neb., Coal Meas. [Sig. very humid.]  
*perlata*, Hall, 1852, Pal. N. Y., vol. 2, Guelph Gr. [Sig. very wide.]  
*perornata*, Shumard, 1859, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. highly ornamented.]  
*pervetusta*, Conrad, 1838, (*Cyclostoma pervetusta*) Ann. Rep. N. Y., Medina sandstone. [Sig. very ancient.]  
*piasaensis*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]  
*planidorsalis*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. plane-backed.]  
*plena*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. full, large.]  
*postumia*, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
*poulsoni*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Onondaga Gr. [Ety. proper name.]  
*pratteni*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci., Low. Coal Meas. [Ety. proper name.]  
*princessa*, Billings, 1874, Pal. Foss., vol. 2, Up. Held. Gr. [Sig. a princess.]  
*progne*, Billings, 1860, Can. Nat. & Geol., vol. 5, Black Riv. & Trenton Gr. [Ety. mythological name.]  
*proutana*, Shumard, 1859, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]  
*quadrucostata*, Hall, 1847, Pal. N. Y., vol. 1, Birdseye Gr. [Sig. four-ribbed.]  
*quebecensis*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
*quinquesulcata*, Winchell, 1865, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. five-furrowed.]  
*ramsayi*, Billings, 1859, Can. Nat. & Geol., vol. 4, Calciferous Gr. [Ety. proper name.]  
*regulata*, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. regular.]  
*riddlei*, Shumard, 1860, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]  
*rota*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. a wheel.]  
*rotalia*, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Sig. wheeled.]  
*rotuloides*, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. and Trenton Gr. [Sig. like a little wheel.]  
*rotunda*, Hall, 1843, (*Euomphalus* ?) *rotundus*) Geo. Rep. 4th Dist. N. Y., Corniferous Gr. [Sig. rounded.]  
*rotundata*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. This name was preoccupied by Munster.  
*rotundispira*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. having a round spire.]  
*scitula*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Low. Coal Meas. [Sig. pretty, neat.]  
*selecta*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. choice, select.]  
*semele*, Hall, 1861, Geo. Rep. Wis., Hud. Riv. Gr. [Ety. mythological name.]  
*shumardi*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Ety. proper name.]  
*sigaretoides*, Winchell & Marcy, 1865, Bost. Soc. Nat. Hist., vol. 1, Niagara Gr. [Sig. like a shell of the genus *Sigaretus*.]  
*sinistrorsa*, Swallow, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. turned to the left.]  
*solarioides*, Hall, 1852, Pal. N. Y., vol. 2, Guelph Gr. [Sig. like a shell of the genus *Solarium*.]  
*speciosa*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Low. Coal Meas. [Sig. beautiful.]  
*sphaerulata*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. a widened sphere.]  
*spironema*, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. spiral-lined.]  
*sponsa*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. betrothed.]  
*stella*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. a star.]

subangulata, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. somewhat angular.]

subconica, Hall, 1847, Pal. N. Y., vol. 1, Black Riv., Trenton & Hud. Riv. Gr. [Sig. somewhat conical.]

subconstricta, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Low. Coal Meas. [Sig. somewhat constricted.]

subdecussata, Geinitz, 1866, Carb. und Dyas in Neb., Coal Meas. [Sig. somewhat arranged in pairs that cross each other.]

subdepressa, Hall, 1852, Pal. N. Y., vol. 2, Coralline limestone. [Sig. somewhat depressed.]

subscalaris, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Low. Coal Meas. [Sig. somewhat ladder-shaped.]

subsinnuata, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. somewhat sinuated.]

subtilistriata, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. finely shaped.]

subturbinata, Meek & Hayden, 1872, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. somewhat top-shaped.]

sulcomarginata, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. having the margin deeply furrowed.]

supracingulata, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. encircled with lines on the upper part.]

swallovana, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]

sybillina, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Ety. proper name.]

tabulata, Conrad, 1835, (Turbo tabulata) Trans. Geo. Soc. Penn., vol. 1, Coal Meas. [Sig. tabulated.]

tectoria, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. rough cast.]

tenuicincta, Meek & Worthen, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. finely girded.]

tenuistriata, Shumard, 1860, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. finely striated.]

textiliger, Meek, 1871, Proc. Acad. Nat. Sci., Waverly Gr. [Sig. web-bearing.]

thalia, Billings, 1857, Rep. of Progr., Mid. Sil. [Ety. mythological name.]

trilineata, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. three-lined.]

trilix, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. three-lined.]

trochiformis, Swallow, 1863, Trans. St. Louis Acad. Sci., Chester Gr. [Sig. like the Trochus, or wheel-shell.] The name was preoccupied by Portlock in 1843.

tropidophora, Meek, 1872, Am. Jour. Sci. & Arts, 3rd series, vol. 4, Cin'ti Gr. [Sig. keel-bearing.]

tumida, Meek & Worthen, 1860, (Platystoma tumida) Proc. Acad. Nat. Sci., Coal Meas. [Sig. tumid.] The name was preoccupied by Phillips in 1836.

turbiniiformis, Meek & Worthen, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. top-shaped.]

turgida, Hall, 1847, Pal. N. Y., vol. 1, Calciferous Gr. [Sig. swollen.]

umbilicata, see Trochonema umbilicatum.

unisulcata, see Platyceras unisulcatum.

vadosa, Hall, 1860, 13th Reg. Rep., N. Y., Ham. Gr. [Sig. shallow.]

vagans, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Sig. dispersed.]

valeria, Billings, 1865, Pal. Foss., vol. 1, Guelph Gr. [Ety. proper name.]

valvatiiformis, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. like the genus Valvata.]

viola, Billings, 1865, Pal. Foss., vol. 1, Guelph Gr. [Sig. a violet.]

virgo, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. a virgin.]

virguncula, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. a little maid.]

vitruvia, Billings, 1865, Pal. Foss., vol. 1, Black Riv. Gr. [Ety. proper name.]

voltumna, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Ety. mythological name.]

whitii, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. proper name.]

wortheni, Hall, 1856, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]

POLYPHEMOPSIS, Portlock, 1843, Geol. Londonderry. [Ety. *Polyphemus*, a genus of shells; *opsis*, appearance.]

bulimiformis, Hall, 1858, (Bulimella bulimiformis) Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. like a *Bulimus*.]

canaliculata, Hall, 1858, (Bulimella canaliculata) Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. channeled or grooved.]

chrysalis, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. chrysalis.]

elongata, Hall, 1858, (Bulimella elongata) Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. lengthened.] The name was preoccupied by Portlock in 1843.

inornata, Meek & Worthen, 1860, (Loxonema inornata) Proc. Acad. Nat. Sci. Phil., Up. Coal Meas. [Sig. not adorned.]

louisville, Hall, 1872, 24th Reg. Rep., Up. Held. Gr. [Ety. proper name.]

nitidula, Meek & Worthen, 1860, (Loxonema nitidula) Proc. Acad. Nat. Sci. Phil., Up. Coal Meas. [Sig. quite neat.]

peracuta, Meek & Worthen, 1860, (Eulima (?) peracuta) Proc. Acad. Nat. Sci. Phil., Up. Coal Meas. [Sig. very sharp-pointed.]

PORCELLIA, Leveille, 1835, Mem. Soc. Geol. France. [Ety. *porcellus*, a little pig.]

hertzeri, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Ety. proper name.]



- nais, Hall, 1862, (*Gyroceras nais*) 15th Reg. Rep. N. Y., Chemung Gr. [Ety. mythological name.]
- nodosa, Hall, 1860, Supp. to vol. 1, pt. 2, Iowa Geo. Sur., Kinderhook Gr. [Sig. knotty.]
- obliquinoda, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Chemung Gr. [Sig. oblique-knotted.]
- rectinoda, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. straight-noded.]
- (?) rotatoria, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. whorled.]
- sciota, Hall, 1873, 23rd Reg. Rep. N. Y., Up. Held. Gr. [Ety. proper name.]
- senex*, see *Platyceras senex*.
- PUPA, Humphrey, 1797, Museum Calonnianum. [Ety. *Pupa*, chrysalis shell.]
- vermillionensis, Bradley, 1872, Am. Jour. Sci., 3rd series, vol. 4, Coal Meas. [Ety. proper name.]
- vetusta, Dawson, 1860, Quar. Jour. Geo. Soc., vol. 16, Coal Meas. [Sig. ancient.]
- RAPHISTOMA, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *raphe*, seam or suture; *stoma*, mouth.]
- apertum, Salter, 1859, Can. Org. Rem., Decade 1, Black Riv. & Trenton Gr. [Sig. open.]
- labiatum, Emmons, 1842, (*Maclurea labiata*) Geo. Rep. N. Y., Calciferous Gr. [Sig. having lips.]
- lapicida, Salter, 1859, Can. Org. Rem., Decade 1, Black Riv. & Trenton Gr. [Ety. from its resemblance to *Helix lapicida*.]
- lenticulare, Emmons, 1842, (*Pleurotomaria lenticularis*) Geo. Rep. N. Y., Trenton & Hud. Riv. Gr. [Sig. lens-shaped.]
- planistria, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. [Sig. having plane striae.]
- planistria *var.* parvum, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. [Sig. small.]
- stamineum, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. [Sig. thready; having reference to the thread like striae on the surface.]
- striatum, Emmons, 1842, (*Macluria striata*) Geo. Rep. N. Y., Chazy Gr. [Sig. striated.]
- subplanum, Shumard, 1863, Trans. St. Louis Acad. Sci., Calciferous Gr. [Sig. somewhat flat.]
- SCALITES, Conrad, 1842, Geo. Rep. N. Y. by Emmons. [Ety. *scala*, a stair case.]
- angulatus, Conrad, 1842, Geo. Rep. N. Y. by Emmons, Chazy Gr. [Sig. angular.]
- Solarium*, Lamarck, 1801, Syst. An. sans Vert.
- leai*, one of Troost's catalogue names.
- SOLENISCUS, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil. [Ety. *soleniskos*, a little channel or gutter.]
- hallanus, Geinitz, 1866, (*Macrocheilus hallanus*) Carb. und Dyas in Neb., Coal Meas. [Ety. proper name.]
- typicus, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Up. Coal Meas. [Ety. the type of the genus.]
- STRAPAROLLINA, Billings, 1865, Pal. Foss., vol. 1. [Ety. from the resemblance to shells of the genus *Straparollus*.]
- asperostriata, Billings, 1860, (*Straparollus asperostriatus*) Can. Nat. & Geol., vol. 5, Black Riv. Gr. [Sig. roughly striated.]
- circe, Billings, 1860, (*Straparollus circe*) Can. Nat. & Geol., vol. 5, Black Riv. Gr. [Ety. mythological name.]
- eurydice, Billings, 1860, (*Straparollus eurydice*) Can. Nat. & Geol., vol. 5, Black Riv. Gr. [Ety. mythological name.]
- pelagica, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. belonging to the deep sea.]
- remota, Billings, 1874, Pal. Foss., vol. 2, Potsdam Gr. [Sig. remote, at a distance.]
- STRAPAROLLUS, Montfort, 1810, Conch. Syst., vol. 2. [Ety. *strabos*, turned about.]
- angulatus, Emmons, 1856, Am. Geo. Chazy Gr. [Sig. angular.]
- asperostriatus*, see *Straparollina asperostriata*.
- barrisi, Winchell, 1863, Proc. Acad. Nat. Sci. Phil., Chemung Gr. [Ety. proper name.]
- canadensis, Billings, 1861, Can. Jour., Devonian. [Ety. proper name.]
- circe*, see *Straparollina circe*.
- clymenioides*, see *Euomphalus clymenoides*.
- cornudanus, Shumard, 1859, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]
- daphne, Billings, 1862, Pal. Foss., vol. 1, Guelph Gr. [Ety. mythological name.]
- eurydice*, see *Straparollina eurydice*.
- hippolyte, Billings, 1862, Pal. Foss., vol. 1, Guelph Gr. [Ety. mythological name.]
- labiatum, Emmons, 1856, Am. Geo., Chazy Gr. [Sig. lipped.]
- lens, Hall, 1860, (*Euomphalus lens*) 13th Reg. Rep., Kinderhook Gr. [Sig. lens-shaped.]
- macromphalus, Winchell, 1863, Proc. Acad. Nat. Sci. Phil., Chemung Gr. [Sig. having a large umbilicus.]
- magnificus, Shumard, 1863, Trans. St. Louis Acad. Sci., Carboniferous. [Sig. magnificent.]
- minnesotensis, Owen, 1852, Geo. Sur. Wis., Iowa and Minn., Calif. Gr. [Ety. proper name.]
- mopsus, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Ety. mythological name.]
- niagarensis, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Ety. proper name.]



- pernodosus, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. very nodose.]
- planidorsatus, Meek & Worthen, 1860, (Euomphalus planidorsatus) Proc. Acad. Nat. Sci. Phil., Chester Gr. [Sig. flat-backed.]
- planispira, Hall, 1858, (Euomphalus planispira) Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. having a flat spire.]
- primordialis, Winchell, 1864, Am. Jour. Sci. & Arts, 2nd series, vol. 37, Potsdam Gr. [Sig. first in order.]
- quadrivolvus, Hall, 1858, (Euomphalus quadrivolvus) Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. having four volutions.]
- similis, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil., St. Louis Gr. [Sig. similar.]
- similis var. planus, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil., St. Louis Gr. [Sig. level, flat.]
- spergenensis, Hall, 1858, (Euomphalus spergenensis) Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]
- spergenensis var. planorbiformis, Hall, 1858, (Euomphalus spergenensis var. planorbiformis) Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. like a shell of the genus *Planorbis*.]
- subquadratus, Meek & Worthen, 1870, Proc. Acad. Nat. Sci., Coal Meas. [Sig. somewhat squared.]
- subrugosus, Meek & Worthen, 1873, Geo. Sur. Ill., vol. 5, Coal Meas. [Sig. somewhat rugose.] Proposed instead of *Euomphalus rugosus* of Hall, which was preoccupied.
- umbilicatus, Meek & Worthen, 1860, (Euomphalus umbilicatus) Proc. Acad. Nat. Sci. Phil., Coal Meas. [Ety. from the large umbilicus.]
- valvatiformis, Shumard, 1863, Trans. St. Louis Acad. Sci., Calciferous Gr. [Sig. like the genus *Valvata*.]
- whitneyi, Meek, 1864, Pal. California, Coal Meas. [Ety. proper name.]
- STREPTAXIS**, Gray, 1837, in Mag. Nat. Hist., [Ety. *stropes*, twisted; *axis*, axis.]
- whitfieldi, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Ety. proper name.]
- STROPHOSTYLUS**, Hall, 1859, Pal. N. Y., vol. 3. [Ety. *strophe*, turning round; *stylos*, column.]
- andrewsi, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Ety. proper name.]
- cancellatus, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Oriskany sandstone. [Sig. latticed.]
- cyclostomus, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. circular-mouthed.]
- depressus, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. depressed.]
- elegans, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. elegant.]
- expansus, Conrad, 1841, (Platyceras expansus) Ann. Rep. N. Y., Oriskany sandstone. [Sig. spread out.]
- fitchi, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- globosus, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. globular.]
- matheri, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Ety. proper name.]
- obliquus, Nicholson, 1874, Rep. Pal. Ont., Devonian. [Sig. oblique.]
- obtusus, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. obtuse.]
- ovatus, Nicholson, 1874, Rep. Pal. Ont., Devonian. [Sig. egg-shaped.]
- rotundatus, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. rounded.]
- subglobosus, Nicholson, 1874, Rep. Pal. Ont., Devonian. [Sig. somewhat globose.]
- transversus, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. crosswise.]
- unicus, Hall, 1862, 15th Reg. Rep., Schoharie grit. [Sig. single, alone.]
- varians, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. variable.]
- Stylifer*, Broderip, 1829, in Sowerby, Gen. Shells.
- primigenia*, see *Macrocheilus primigenium*.
- SUBULITES**, Conrad, 1847, Pal. N. Y., vol. 1. [Ety. *subulites*, awl-shaped—subulate.]
- abbreviatus, Hall, 1850, 3rd Reg. Rep., Trenton Gr. [Sig. shortened.]
- brevis, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Sig. short.]
- calciferus, Billings, 1859, Can. Nat. & Geo., vol. 4, Calciferous Gr. [Ety. from the Group.]
- daphne, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]
- elongatus, Emmons, 1842, Geo. Rep. N. Y., Trenton Gr. [Sig. lengthened.]
- inflatus, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Sig. inflated, swollen.]
- notatus, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. marked.]
- parvulus, Billings, 1862, Pal. Foss., vol. 1, Black Riv. Gr. [Sig. very small.]
- psyche, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]
- richardsoni, Billings, 1857, Rep. of Progr., Hud. Riv. Gr. [Ety. proper name.]
- terebriformis, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Sig. auger-shaped.]
- ventricosus, Hall, 1852, Pal. N. Y., vol. 2, Niagara and Guelph Gr. [Sig. bulging out.]
- TRACHYDOMIA**, Meek & Worthen, 1866, Geo. Sur. Ill., vol. 2. [Ety. *trachys*, rough; *doma*, a house.]

- hollidayi, Meek & Worthen, 1860, (Naticopsis hollidayi) Proc. Acad. Nat. Sci. Phil., Low. Coal Meas. [Ety. proper name.]
- nodosum, Meek & Worthen, 1860, (Naticopsis nodosa) Proc. Acad. Nat. Sci. Phil., Low. Coal Meas. [Ety. from the nodes on the surface.]
- TREMANOTUS, Hall, 1868, 20th Reg. Rep. [Ety. *trema*, a hole; *notus*, the back.]
- alpheus, Hall, 1864, 18th Reg. Rep., Niagara Gr. [Ety. mythological name.]
- trigonostoma, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Sig. triangular-mouthed.]
- TROCHITA, Schumacher, 1817, Essai N. Syst. [Ety. *trochus*, a wheel.]
- antiqua*, see Xenophora antiqua.
- carbonaria, Meek, 1866, Proc. Acad. Nat. Sci., Coal Meas. [Sig. pertaining to coal.]
- TROCHONEMA, Salter, 1859, Can. Org. Rem., Decade 1. [Ety. *trochos*, a wheel; *nema*, a thread.]
- emacratum, Hall, 1872, 24th Reg. Rep., Up. Held. Gr. [Sig. thin, lean.]
- fatua, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Ety. mythological name.]
- pauper, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Sig. paltry, poor.]
- pauper var. ohioense, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Ety. proper name.]
- rectilatera, Hall, 1872, 24th Reg. Rep., Up. Held. Gr. [Sig. straight-sided.]
- tricarinatum, Billings, 1859, Can. Nat. & Geo., vol. 4, Calciferous Gr. [Sig. three-keeled.]
- tricarinata, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Corniferous Gr. The name was preoccupied.
- umbilicatum, Hall, 1847, (Pleurotomaria umbilicata) Pal. N. Y., vol. 1, Chazy to Hud. Riv. Gr. [Sig. navel-shaped.]
- yandellianum, Hall, 1872, 24th Reg. Rep., Up. Held. Gr. [Ety. proper name.]
- Trochus, Adanson, 1757, Voy. Senegal. [Ety. *trochus*, a hoop.]
- missouriensis, see Pleurotomaria missouriensis.
- TURBO, Klein, 1753, Tent. Meth. Ostr. [Ety. *turbo*, a top.]
- bicarinatus, Troost, 1840. Not defined.
- dilucula, see Holopea dilucula.
- guadalupensis, Shumard, 1859, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- lineatus, see Pleurotomaria lineata.
- obesus, Shumard, 1858, Trans. St. Louis Acad. Sci., Up. Coal Meas. [Sig. plump in form.]
- (?) obscura, see Holopea obscura.
- tabulata, see Pleurotomaria tabulata.
- tennesseensis, see Cyclonema tennesseense.
- texanus, Shumard, 1859, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]
- Turbonilla, Leach, 1826, Risso Eur. Merid. 4. [Ety. diminutive of *Turbo*, a genus of shells.]
- swallowana, see Aclis swallowana.
- TURRITELLA, Lamarck, 1801, Syst. An. sans Vert. [Ety. *turritella*, a little tower.]
- stevenana, Meek & Worthen, 1866, Geo. Sur. Ill., vol. 2, Up. Coal Meas. [Ety. proper name.]
- XENOPHORA, Fischer, 1806, Museum Demidovianum. [Ety. *xenos*, a log or body; *phoros*, bearing.]
- antiqua, Meek, 1871, (Trochita antiqua) Proc. Acad. Nat. Sci. Phil., Corniferous Gr. [Sig. ancient.]
- ZONITES, Montfort, 1810, Conch. Syst. [Ety. *zone*, a belt.]
- priscus, Carpenter, 1867, Quar. Jour. Geo. Soc., vol. 23, Coal Meas. [Sig. ancient.]

# CLASS CEPHALOPODA.

FAMILY ASCOCERATIDÆ.—Ascoceras, Conoceras, Glossoceras.

FAMILY CERIOLIDÆ.—Beatricea.

FAMILY CYRTOCERATIDÆ.—Cyrtoceras, Cyrtocerina, Oncoceras.

FAMILY GOMPHOCERATIDÆ.—Gomphoceras.

FAMILY GONIATITIDÆ.—Goniatites.

FAMILY GYROCERATIDÆ.—Gyroceras.

FAMILY NAUTILIDÆ.—Discites, Lituites, (?) Nautilus, Pteronutilus, Solenocheilus, Temnocheilus, Trematodiscus, Trocholites. (?)

FAMILY ORTHOCERATIDÆ.—Actinoceras, Cameroceras, Colpoceras, Diploceras, Endoceras, Gonioceras, Huronia, Ormoceras, Orthoceras, Piloceras.

FAMILY PHRAGMOCERATIDÆ.—Phragmoceras, Streptoceras.

FAMILY TROCHOCERATIDÆ.—Trochoceras.

INCERTÆ SEDIS.—Discosorus, Særichnites.

ACTINOCERAS, Bronn, 1837, Lethaea Geognostica. [Ety. *aktin*, a ray; *keras*, a horn.]

*biggsbyi*, Stokes, 1840, Trans. Geo. Soc., 2nd series, vol. 5, Chazy Gr. [Ety. proper name.]

*inops*, Dawson, 1868, Acad. Geol., Carb. [Ety. *meagre*.]

*lyoni*, Stokes, 1840, Trans. Geol. Soc., vol. 5, Black Riv. Gr. [Ety. proper name.]

*richardsoni*, Stokes, 1840, Trans. Geol. Soc., 2nd series, vol. 5, Silurian. [Ety. proper name.]

*simmsi*, Stokes, 1840, Trans. Geo. Soc., 2nd series, vol. 5, Sil. [Ety. proper name.]

ASCOCERAS, Barrande, 1848, Haidinger's Berichte. [Ety. *askos*, a leather bottle; *keras*, horn.]

*anticostiense*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Ety. proper name.]

*canadense*, Billings, 1857, Rep. of Progr., Hud. Riv. Gr. [Ety. proper name.]

*newberryi*, Billings, 1862, Pal. Foss., vol. 1, Hud. Riv. & Anticosti Gr. [Ety. proper name.]

BEATRICEA, Billings, 1857, Rep. of Progr. [Ety. proper name.] This genus is supposed, by Hyatt, (Am. Jour. Sci. & Arts, 1865) to belong to the class Cephalopoda, and he proposed a new order for the genus, to wit: *Ceriolites*, from *kerion*, a honey comb; *lithos*, a stone, and a new family *Ceriolidae*.

*nodulosa*, Billings, 1857, Rep. of Progr., Hud. Riv. & Mid. Sil. [Sig. having small knots.]

*undulata*, Billings, 1857, Rep. of Progr., Mid. Sil. [Sig. wavy.]

CAMEROCERAS, Conrad, 1842, Jour. Acad. Nat. Sci. Phil., vol. 8. [Ety. *kamara*, a chamber; *keras*, horn.]

*trentonense*, Conrad, 1842, Jour. Acad. Nat. Sci. Phil., vol. 8, Trenton Gr. [Ety. proper name.]

COLPOCERAS, Hall, 1850, 3rd Reg. Rep. N. Y. [Ety. *kolpos*, a furrow; *keras*, horn.]

*virgatum*, Hall, 1850, 3rd Reg. Rep. N. Y., Birdseye and Black Riv. Gr. [Sig. wand-like.]

*Clymenia*, Munster, 1832. [Ety. mythological name.]

*complanata*, see Goniatites *complanatus*. *erato*, see Goniatites *erato*.

*Coniites*, Schlotheim, 1820, Petrefactenkunde, etc. [Ety. *konos*, a cone; *lithos*, stone.]

*capricornulus*, Troost, 1840, 5th Geo. Rep. Tenn. Not satisfactorily defined.

CONOCERAS, Bronn, 1835, Leth. Geogn. [Ety. *konos*, a cone; *keras*, horn.]

*angulosum*, Bronn, 1834, Leth. Geogn., Black Riv. Gr. [Sig. full of corners.]

*Conotubularia*, Troost, syn. for Orthoceras.

*brongniarti*, see Orthoceras *brongniarti*.

*cuvieri*, see Orthoceras *cuvieri*.

*defranciai*, see Orthoceras *defranciai*.

*goldfussi*, see Orthoceras *goldfussi*.

*Conulites*, Cozzens, 1848. Not satisfactorily defined.

*angulosum*, Cozzens, 1848. Not satisfactorily defined. It may be a plant.

*Cryptoceras*, D'Orbigny, 1850. [Ety. *kryptos*, concealed; *keras*, horn.] This name was preoccupied by Latreille for a genus of insects, and had been previously used by Barrande for a genus of Cephalopods.

*capax*, see *Solenocheilus capax*.

*CYRTOCERAS*, Goldfuss, 1832, in De la Beche's *Handbuch der Geognosie* bearbeitet von v. Deschen. [Ety. *kurtos*, curved; *keras*, horn.]

*absens*, Hall, 1876, *Illust. Devonian Foss.*, Schoharie grit. [Sig. absent, distant.]

*alethes*, Billings, 1865, *Pal. Foss.*, Quebec Gr. [Ety. proper name.]

*amplicorne*, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Sig. a large horn.]

*annulatum*, Hall, 1847, *Pal. N. Y.*, vol. 1, Black Riv. & Trenton Gr. [Sig. ringed.] This name was preoccupied by Goldfuss in 1832.

*arcticameratum*, Hall, 1852, *Pal. N. Y.*, vol. 2, Guelph Gr. [Sig. close-chambered.]

*arcuatum*, Hall, 1847, *Pal. N. Y.*, vol. 1, Trenton Gr. [Sig. bent; in allusion to the arched chambers.] The name was preoccupied by Steininger in 1830, see D'Archiac & Verneuil, *Memoir on Pal. Foss.*, 1842.

*aristides*, Billings, 1865, *Pal. Foss.*, Quebec Gr. [Ety. mythological name.]

*beta*, Hall, 1862, (*Gomphoceras beta*) 15th Reg. Rep., Schoharie grit. [Sig. a Greek letter.]

*billingsi*, Salter, 1859, *Can. Org. Rem.*, Decade 1, Chazy or Black Riv. Gr. [Ety. proper name.]

*bondi*, Safford, 1869, *Geo. of Tenn.*, Nashville Gr. [Ety. proper name.]

*brevicorne*, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Sig. short-horned.]

*camurum*, Hall, 1847, *Pal. N. Y.*, vol. 1, Trenton Gr. [Sig. crooked.]

*cancellatum*, Hall, 1852, *Pal. N. Y.*, vol. 2, Niagara Gr. [Sig. cancellated.] The name was preoccupied by Roemer in 1844.

*carrollense*, Worthen, 1875, *Geo. Sur. Ill.* vol. 6, Galena Gr. [Ety. proper name.]

*clavatum*, Hall, 1876, *Illust. Devonian Foss.*, Schoharie grit. [Sig. club-shaped.]

*clitus*, Billings, 1866, *Catal. Sil. Foss. Antic.*, Niagara Gr. [Ety. proper name.]

*conicum*, Owen, 1840, *Rep. on Min. Lands*, Up. Magnesian Gr. [Sig. conical, tapering to a point.]

*conradi*, Hall, 1860, (*Gomphoceras conradi*) 13th Reg. Rep., Ham. Gr. [Ety. proper name.]

*constrictostriatum*, Hall, 1847, *Pal. N. Y.*, vol. 1, Trenton Gr. [Sig. constricted and striated.]

*corniculum*, Hall, 1862, *Geo. Rep. Wis.*, Trenton Gr. [Sig. a little horn.] The name was preoccupied by Barrande in 1848, and again by Eichwald in 1860.

*corydon*, Billings, 1866, *Catal. Sil. Foss. Antic.*, Niagara Gr. [Ety. proper name.]

*curtum*, Meek & Worthen, 1860, *Proc. Acad. Nat. Sci. Phil.*, Up. Coal Meas. [Sig. short.] Was this name preoccupied by Eichwald?

*dardanus*, Hall, 1861, *Rep. of Progr. Geo. Sur. of Wis.*, Niagara Gr. [Ety. mythological name.]

*dictys*, Billings, 1865, *Pal. Foss.*, Quebec Gr. [Ety. mythological name.]

*dictyum*, White, 1876, *Proc. Acad. Nat. Sci.*, Devonian. [Sig. a net.]

*dilatatum*, Meek & Worthen, 1860, *Proc. Acad. Nat. Sci. Phil.*, Up. Coal Meas. [Sig. widened, spread out.]

*dorsatum*, Swallow, 1858, *Trans. St. Louis Acad. Sci.*, Permian Gr. [Sig. high-backed.]

*eugenium*, Hall, 1862, 15th Reg. Rep., Schoharie grit. [Ety. proper name.]

*eugium*, Hall, 1861, *Rep. of Progr. Wis.*, Chazy & Black Riv. Gr. [Sig. fertile.]

*exiguum*, Billings, 1860, *Can. Nat. & Geo.*, vol. 5, Trenton Gr. [Sig. little, small.]

*falx*, Billings, 1857, *Rep. of Progr.*, Black Riv. & Trenton Gr. [Sig. a sickle.]

*filosum*, Emmons, 1842, *Nat. Hist. N. Y.*, vol. 4, Trenton Gr. [Sig. covered with thread-like markings.]

*fosteri*, Hall, 1861, *Rep. of Progr. Geo. Sur. Wis.*, Niagara Gr. [Ety. proper name.]

*fragile*, Billings, 1866, *Catal. Sil. Foss. Antic.*, Anticosti Gr. [Sig. frail, easily broken.]

*gibbosum*, Hall, 1876, *Illust. Devonian Foss.*, Ham. Gr. [Sig. gibbous.]

*giganteum*, McChesney, Jan. 1860, *New Pal. Foss.*, Niagara Gr. In 1861 McChesney referred this species to the genus *Lituites*, and proposed for it the name *Lituites cancellatus*. Prof. Hall, in the meantime, described it as *Lituites occidentalis*. It is now referred to the genus *Nautilus*, and as both the earlier names were preoccupied, McChesney's name *cancellatus* has precedence.

*hercules*, Winchell & Marcy, 1865, (*Lituites hercules*) *Mem. Bost. Soc. Nat. Hist.*, Niagara Gr. [Ety. mythological name.]

*hertzeri*, Hall & Whitfield, 1875, *Ohio Pal.*, vol. 2, Niagara Gr. [Ety. proper name.]

*huronense*, Billings, 1865, *Pal. Foss.*, Black Riv. or Trenton Gr. [Ety. proper name.]

*isidorus*, Billings, 1865, *Pal. Foss.*, Black Riv. or Trenton Gr. [Ety. proper name.]

*janus*, see *Streptoceras janus*.  
*jason*, Hall, 1862, 15th Reg. Rep., Schoharie grit. [Ety. mythological name.]  
*juvenalis*, Billings, 1865, Pal. Foss., Trenton Gr. [Ety. proper name.]  
*lamellosum*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. having many thin plates.] The name was preoccupied by D'Archiac & Verneuil in 1842.  
*laterale*, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Sig. lateral.]  
*ligarius*, Billings, 1875, Pal. Foss., Hud. Riv. Gr. [Ety. proper name.]  
*liratum*, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Sig. furrowed.]  
*loculosum*, Hall, 1861, Rep. of Progr. Wis., Trenton Gr. [Sig. partitioned.]  
*lucillus*, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Ety. proper name.]  
*lysander*, Billings, 1862, Pal. Foss., Hud. Riv. Gr. [Ety. proper name.]  
*macrostomum*, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. and Trenton Gr. [Sig. long-mouthed.]  
*magister*, S. A. Miller, 1875, Cin. Quar. Jour. of Sci., vol. 2, Cin'ti Gr. [Sig. the chief.]  
*marginale*, Conrad, 1843, Proc. Acad. Nat. Sci. [Sig. bordered.] The name was preoccupied by Phillips in 1841.  
*massiense*, Safford, 1869, Geo. of Tenn., Nashville Gr. [Ety. proper name.]  
*matheri*, see *Gyroceras matheri*.  
*maccoyi*, Billings, 1859, Can. Nat. & Geo., vol. 4, Chazy Gr. [Ety. proper name.]  
*maximum*, see *Nautilus maximus*.  
*mercurius*, see *Cyrtoceras mercurius*.  
*metellus*, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]  
*metula*, Hall, 1862, 15th Reg. Rep., Up. Held. Gr. [Sig. a little obelisk.]  
*missisquoi*, Billings, 1865, Pal. Foss., (Orthoceras missisquoi) Quebec Gr. [Ety. proper name.]  
*morsum*, Hall, 1862, 15th Reg. Rep., Up. Held. Gr. [Sig. bitten off.]  
*multicameratum*, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. & Trenton Gr. [Sig. many-chambered.]  
*myrice*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Ety. mythological name.]  
*neleus*, Hall, 1861, Rep. of Progr. Wis., Chazy & Black Riv. Gr. [Ety. mythological name.]  
*obscurum*, S. A. Miller, changed to *magister* because *obscurum* was preoccupied.  
*ohioense*, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Corniferous Gr. [Ety. proper name.]  
*orcas*, Hall, 1861, Rep. of Progr. Geo. Sur. Wis., Niagara Gr. Subsequently referred by Hall to the genus *Oncoceras*, see 20th Reg. Rep.  
*orestes*, Billings, 1865, Pal. Foss., Niagara Gr. [Ety. mythological name.]

*orion*, Hall, 1876, Illust. Devonian Foss., Schoharie grit. [Ety. mythological name.] This name was preoccupied by Barrande.  
*orodes*, Billings, 1862, Pal. Foss., Guelph Gr. [Ety. mythological name.]  
*postumius*, Billings, 1865, Pal. Foss., Hud. Riv. Gr. [Ety. proper name.]  
*pusillum*, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Sig. very small.]  
*regulare*, Billings, 1857, Rep. of Progr. Black Riv. and Trenton Gr. [Sig. regular.]  
*rigidum*, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Sig. rigid.]  
*rockfordense*, Winchell, 1865, Proc. Acad. Nat. Sci., Kinderhook (?) Gr. [Ety. proper name.]  
*sacculus*, Meek & Worthen, 1866, (Gomphoceras sacculus) Proc. Acad. Nat. Sci. Phil., Ham. Gr. [Sig. a little sack.]  
*septoris*, Hall, see *Gomphoceras septime*.  
*simplex*, Billings, 1857, Rep. of Progr., Black Riv. & Trenton Gr. [Sig. simple.]  
*sinuatum*, Billings, 1857, Rep. of Progr., Black Riv. Gr. [Sig. marked with depressions.]  
*spinosum*, see *Gyroceras spinosum*.  
*stonense*, Safford, 1869, Geo. of Tenn., Trenton Gr. [Ety. proper name.]  
*subrectum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. somewhat straight.]  
*subturbatum*, Billings, 1857, Rep. of Progr., Chazy & Black Riv. Gr. [Sig. somewhat top-shaped.]  
*surgens*, Barrande, 1869, Syst. Sil. de Boh., 4me serie, Quebec Gr. [Sig. rising.]  
*syphax*, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. mythological name.]  
*tesselatum*, de Koninck. Not American.  
*transversum*, see *Gyroceras transversum*.  
*trentonense*, Emmons, 1842, (Orthoceras trentonensis) Geo. Rep. N. Y., Trenton Gr. [Ety. proper name.]  
*trivolvus*, see *Gyroceras trivolve*.  
*typicum*, see *Cyrtoceras typica*.  
*undulatum*, Hall, 1876, Illust. Devonian Foss., Schoharie grit. [Sig. wavy.]  
*undulatum*, Vanuxem, see *Gyroceras undulatum*.  
*unicorn*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. one-horned.]  
*vallandigham*, S. A. Miller, 1874, Cin. Quar. Jour. Sci., Cin'ti Gr. [Ety. proper name.]  
*ventricosum*, S. A. Miller, 1875, Cin. Quar. Jour. Sci., vol. 2, Cin'ti Gr. [Sig. bulging out; rapidly enlarging.]  
*whitneyi*, Hall, 1861, Rep. of Progr. Wis., Hud. Riv. Gr. [Ety. proper name.]  
*CYRTOCERINA*, Billings, 1865, Pal. Foss. [Ety. from the termination *inus*, signifying resemblance to *Cyrtoceras*.]  
*mercurius*, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. mythological name.]

- typica, Billings, 1865, Pal. Foss., Black Riv. Gr. [Sig. type of the genus.]
- DIPLOCERAS, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8. [Ety. *diploos*, double; *keras*, horn.]
- vanuxemi, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Trenton Gr. [Ety. proper name.]
- DISCITES, DeHaan, 1825, Mongr. Ammon., etc. [Ety. *diskos*, a quoit.]
- disciformis, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. in the shape of a quoit.]
- highlandensis, Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Ety. proper name.]
- ornatus*, syn. for *Nautilus marcellensis*.
- tuberculatus, Owen, 1852, Geo. Sur. Wis., Iowa and Minn., Low. Carb. [Sig. covered with tubercles.]
- DISCOSORUS, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *diskos*, a quoit; *soros*, a heap or pile.]
- conoideus, Hall, 1852, Pal. N. Y., vol. 2, Clinton & Niagara Gr. [Sig. conical.]
- ENDOCERAS, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *endos*, within; *keras*, horn.] This genus seems to be founded upon the same fossils that Conrad previously founded his genus *Diploceras* upon.
- angusticameratum, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. narrow-chambered.]
- annulatum, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. ringed.]
- approximatum, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. approximating.]
- arctiventrum, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Ety. *arctus*, close; *venter*, a cavity.]
- atlanticum, Barrande, 1869, Syst. Sil. de Boh., 2d ser., 4me, Quebec Gr. [Sig. Atlantic.]
- distans, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. distant.]
- duplicatum, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. doubled.]
- gemelliparum, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. Gr. [Sig. twins, in allusion to the two embryo-tubes enclosed within the siphuncle.]
- insulare, Barrande, 1869, Syst. Sil. de Boh., 2d ser., 4me, Quebec Gr. [Sig. belonging to an island.]
- lativentrum, Hall, 1850, 3rd Reg. Rep. N. Y., Trenton Gr. [Ety. *latus*, broad; *venter*, cavity.]
- longissimum, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. & Trenton Gr. [Sig. of unusual length.]
- magniventrum, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Ety. *magnus*, large; *venter*, cavity.]
- marcoui, Barrande, 1869, Syst. Sil. de Boh., 2d ser., 4me, Quebec Gr. [Ety. proper name.]
- multitubulatum, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. & Trenton Gr. [Sig. having many pipes.]
- proteiforme, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. and Trenton Gr. [Sig. having many shapes.]
- proteiforme var. *elongatum*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. lengthened.]
- proteiforme var. *lineolatum*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. marked with fine lines.]
- proteiforme var. *strangulatum*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. constricted.]
- proteiforme var. *tenuistriatum*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. fine-lined.]
- proteiforme var. *tenuitextum*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. finely woven.]
- rapax, Billings, 1860, (Orthoceras rapax) Can. Nat. & Geol., vol. 5, Black Riv. Gr. [Sig. ravenous.]
- rottermundi, Barrande, 1866, (Orthoceras rottermundi) Syst. Sil. de Boh., 2d ser., 2me, Trenton Gr. [Ety. proper name.]
- subcentrale, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. Gr. [Sig. nearly central.]
- Endolobus*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil. [Ety. *endos*, within; *lobos*, a lobe.] Prof. Meek said later that this genus is not distinct from *Temnocheilus*, and if distinct it would probably be a synonym for Montfort's genus *Bisiphites*.
- peramplum*, see *Temnocheilus peramplum*.
- spectabilis*, see *Temnocheilus spectabile*.
- GLOSSOCERAS, Barrande, 1865, Cephalopods of Bohemia, vol. 2. [Ety. *glosse*, the tongue; *keras*, a horn.]
- desideratum, Billings, 1866, Catal. Sil. Foss. Antic., Clinton Gr. [Sig. rare.]
- GOMPHOCERAS, Sowerby, 1839, Murch. Sil. Syst. [Ety. *gomphos*, a club; *keras*, a horn.]
- beta*, see *Cyrtoceras beta*.
- conradi*, see *Cyrtoceras conradi*.
- eos, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Cin'ti Gr. [Sig. the dawn.]
- eximium, Hall, 1861, 14th Reg. Rep., Up. Held. Gr. [Sig. choice, unparalleled.]
- fischeri, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Ety. proper name.]
- marcyæ*, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist., Niagara Gr. Syn. for *G. scriinium*.
- obesum, Billings, 1857, Rep. of Progr., Utica Gr. [Sig. plump in form.]
- omieron, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Ety. a letter of the Greek alphabet.]
- oviforme, Hall, 1860, 13th Reg. Rep. N. Y., Ham. Gr. [Sig. egg-shaped.]
- sacculum, see *Cyrtoceras sacculum*.
- scriinium, Hall, 1864, 20th, Reg. Rep. N. Y., Niagara Gr. [Sig. a casket.]

- septore, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Ety. *septem*, seven; *os-oris*, a mouth.]
- subgracile, Billings, 1857, Rep. of Progr., Up. Sil. [Sig. somewhat slender.]
- turbiniforme, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Ham. Gr. [Sig. formed like a top.]
- GONIATITES, DeHaan, 1825, Monogr. Ammonites et Goniatites. [Ety. *gonia*, an angle: *lithos*, stone.] This name, it seems, should be spelled Goniolites.
- allei, Winchell, 1862, Am. Jour. Sci., 2nd series, vol. 33, Marshall Gr. [Ety. proper name.]
- bicostatus, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Portage Gr. [Sig. double-ribbed.]
- chemungensis, Vanuxem, 1843, Geo. Rep. 3rd Dist. N. Y., Chemung Gr. [Ety. proper name.]
- chemungensis *var.* *aequicostatus*, Hall, 1875, 27th Reg. Rep. N. Y., Chemung Gr. [Sig. equal-ribbed.]
- choctawensis, Shumard, 1863, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]
- compactus, Meek & Worthen, 1875, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. compact.]
- complanatus, Hall, 1843, (Clymenia (?) complanatus) Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. smoothed.]
- complanatus *var.* *perlatus*, Hall, 1875, 27th Reg. Rep. N. Y., Chemung Gr. [Sig. very wide.]
- discoideus, Hall, 1860, 13th Reg. Rep. N. Y., Ham. Gr. [Sig. disc-like.]
- discoideus *var.* *ohioensis*, Hall, 1874, 27th Reg. Rep. N. Y., Up. Held. Gr. [Ety. proper name.]
- entogonus, Gabb, 1861, Proc. Acad. Nat. Sci., Carboniferous. [Sig. angular within.]
- erato, Hall, 1862, (Clymenia erato) 15th Reg. Rep., Ham. Gr. [Ety. mythological name.]
- expansus, Vanuxem, 1842, Geo. Rep. 3rd Dist. N. Y., Marcellus shale. [Sig. expanded.]
- globulosus, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Up. Coal Meas. [Sig. like a small ball.]
- hathawayanus, McChesney, 1860, Desc. New Pal. Foss., Coal Meas. [Ety. proper name.]
- holmesii, Swallow, 1860, Trans. St. Louis Acad. Sci., Chemung Gr. [Ety. proper name.]
- houghtoni, Winchell, 1862, Am. Jour. Sci., 2d ser., vol. 33, Marshall Gr. [Ety. proper name.]
- hyas, Hall, Dec., 1860, 13th Reg. Rep., Low Carb. [Ety. mythological name.]
- iowensis, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Ety. proper name.]
- ixion, Hall, 1860, 13th Reg. Rep., Ham. Gr. This species is founded on the form which has been identified with the European species *G. rotatorius*. [Ety. mythological name.]
- lyoni, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Kinderhook (?) Gr. [Ety. proper name.]
- marcellensis, see Nautilus marcellensis.
- marshallensis, Winchell, 1862, Am. Jour. Sci., 2d ser., vol. 33, Marshall Gr. [Ety. proper name.]
- minimus, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. very small.]
- mithrax, Hall, 1860, 13th Reg. Rep. N. Y., Up. Held. Gr. [Ety. *mithrax*, a precious stone.]
- morganensis, Swallow, 1860, Trans. St. Louis Acad. Sci., Chouteau or Chemung Gr. [Ety. proper name.]
- nolinensis, Cox, 1857, Geo. Sur. Ky., vol. 3, Coal Meas. [Ety. proper name.]
- nundaia, Hall, 1875, 27th Reg. Rep. N. Y., Portage Gr. [Ety. proper name.]
- orbicella, Hall, 1860, 13th Reg. Rep. N. Y., Ham. Gr. [Sig. a little circle.]
- osagensis, Swallow, 1860, Trans. St. Louis Acad. Sci., Chemung Gr. [Ety. proper name.]
- oweni, Hall, 1860, 13th Reg. Rep. N. Y., Ham. Gr. [Ety. proper name.]
- oweni *var.* *parallelus*, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. parallel.]
- parvus, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. small.]
- patersoni, Hall, 1860, 13th Reg. Rep. N. Y., Portage Gr. [Ety. proper name.]
- peracutus, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. very acute.]
- planorbiformis, Shumard, 1855, Geo. Sur. Mo., Coal Meas. [Sig. like a shell of the genus *Planorbis*.]
- politus, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. smoothed.]
- propinquus, Winchell, 1862, Am. Jour. Sci. & Arts, 2nd series, vol. 33, Marshall Gr. [Sig. related.]
- punctatus, Conrad, 1838, Ann. Rep. N. Y., Ham. Gr. [Sig. dotted.]
- pygmaeus, Winchell, 1862, Am. Jour. Sci. and Arts, 2nd series, vol. 33, Marshall Gr. [Ety. mythological name.]
- rotatorius, DeKoninck, 1843, Desc. des Anim. Foss. du Terr. Carb. See *G. ixion*.
- shumardanus, Winchell, 1865, Am. Jour. Sci. & Arts, 2nd series, vol. 33, Marshall Gr. [Ety. proper name.]
- simulator, Hall, 1875, 27th Reg. Rep., Chemung Gr. [Sig. a dissembler.]
- sinuosus, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Portage Gr. [Sig. full of furrows.]
- sulciferus, Winchell. Not defined.
- texanus, Shumard, 1863, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]



- uniangularis, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. one-angled.]  
 unilobatus, Hall, 1875, 27th Reg. Rep., N.Y., Ham. Gr. [Sig. one-lobed.]  
 whitii, Winchell, 1862, Proc. Acad. Nat. Sci., Portage Gr. [Ety. proper name.]  
 GONIOCERAS, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *gonia*, an angle; *keras*, a horn.]  
 anceps, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. Gr. [Sig. doubtful.]  
 occidentale, Hall, 1861, Rep. of Progr. Wis., Trenton Gr. [Sig. western.]  
 GYROCERAS, DeKoninck, 1841, Desc. An. Foss. Belg. [Ety. *gyros*, circle; *keras*, a horn.] Not Gyroceratites of Meyer, 1829.  
 americanum, Billings, 1857, Rep. of Progr. Can. Geo. Sur., Up. Sil. [Ety. proper name.]  
 bannisteri, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist. See Trochoceras bannisteri.  
 burlingtonense, Owen, 1852, Geo. Sur. Wis., Iowa & Minn., Low. Carb. [Ety. proper name.]  
 constrictum, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Ham. Gr. [Sig. constricted.]  
 cornutum, Owen, 1840, Rep. on Min. Lands, Devonian. [Sig. horned.]  
 cyclops, Hall, 1862, 15th Reg. Rep., Up. Held. Gr. [Ety. mythological name.]  
 eryx, Hall, 1862, 15th Reg. Rep., Up. Held. Gr. [Ety. mythological name.]  
 expansum, Saeman, Dunker & Von Meyer, 1853, Palaeontographica, vol. 4, Marcellus shale. See Nautilus buccinum.  
 gracile, Hall, 1860, 13th Reg. Rep. N. Y., Ham. Gr. [Sig. slender.]  
 hartti, Dawson, 1868, Acad. Geol., Carboniferous. [Ety. proper name.]  
 inelegans, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Corniferous Gr. [Sig. not elegant.]  
 jason, Hall, 1876, Illust. Devonian Foss., Schoharie grit. [Ety. proper name.]  
 liratum, Hall, 1860, 13th Reg. Rep., Marcellus shale. [Sig. furrowed.]  
 logani, Meek, 1868, Trans. Chi. Acad. Sci., Devonian. [Ety. proper name.]  
 magnificum, see Lituities magnificus.  
 matheri, Conrad, 1840, Ann. Rep. N. Y., (Cyrtoceras matheri) Low. Held. Gr. [Ety. proper name.]  
 nais, see Porcellia nais.  
 nereus, Hall, 1862, 15th Reg. Rep., Corniferous Gr. [Ety. mythological name.]  
 numa, Billings, 1875, Can. Nat. & Geol., Corniferous Gr. [Ety. mythological name.]  
 ohioense, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Corniferous Gr. [Ety. proper name.]  
 paucinodum, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. having few knots.]  
 (?) rockfordense, Meek & Worthen, 1866, (Nautilus (Cryptoceras) rockfordensis) Proc. Acad. Nat. Sci. Phil., Kinderhook Gr. [Ety. proper name.]  
 spinosum, Conrad, 1840, (Phragmoceras spinosum) Ann. Rep. N. Y., Schoharie grit. [Sig. spiny.]  
 subliratum, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. somewhat like *G. liratum*.]  
 transversum, Hall, 1860, (Cyrtoceras transversum) 13th Reg. Rep., Ham. Gr. [Sig. crosswise.]  
 trivolve, Conrad, 1840, (Cyrtoceras trivolve) Ann. Rep. N. Y., Low. Held. Gr. [Sig. three-whorled.]  
 undulatum, Vanuxem, 1843, (Cyrtoceras undulatum) Geo. Rep. N. Y., Low. Held. Gr. [Sig. wavy.]  
 vagans, Billings, 1857, Rep. of Progr. Can. Geo. Sur., Black Riv. Gr. [Sig. wandering.]  
 validum, Hall, 1876, Illust. Devonian Foss., Schoharie grit. [Sig. strong.]  
 HURONIA, Stokes, 1823, Geo. Trans., n. s., vol. 1. [Ety. proper name.] When this genus was proposed, the author thought he was describing a coral. Prof. Billings says that the name was proposed for the siphuncle of an Orthoceras, and is, therefore, merely a synonym.  
 annulata, Hall, 1851, Lake Superior Land Dist. by Foster & Whitney, Niagara Gr. [Sig. ringed.]  
 bigsbyi, Stokes, 1823, Trans. Geo. Soc., vol. 1, Clinton Gr. [Ety. proper name.]  
 minuens, Barrande, 1869, Syst. Sil. de Boh., 2d series, vol. 4, Clinton Gr. [Sig. diminished.]  
 obliqua, Stokes, 1823, Trans. Geo. Soc., 2nd series, vol. 1, Clinton Gr. [Sig. oblique.]  
 portlocki, Stokes, 1840, Trans. Geo. Soc., 2nd series, vol. 5, Clinton Gr. [Ety. proper name.]  
 sphaeroidalis, Stokes, 1823, Trans. Geo. Soc., 2nd series, vol. 1, Clinton Gr. [Sig. spherical.]  
 turbinata, Stokes, 1823, Trans. Geo. Soc., 2nd series, vol. 1, Clinton Gr. [Sig. top-shaped.]  
 vertebralis, Stokes, 1823, Trans. Geo. Soc., 2nd series, vol. 1, Niagara and Clinton Gr. [Sig. vertebra-like.] See Orthoceras canadense.  
 Hydnoceras, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8. [Ety. *hydros*, a truffle; *keras*, a horn.] See Dictyophyton, a plant.  
 tuberosum, see Dictyophyton tuberosum.  
 LITUITES, Montfort, 1808, Conch. Syst. [Ety. *lituus*, a trumpet.]  
 apollo, Billings, 1862, Pal. Foss., Calif. Gr. [Ety. mythological name.]

- cancellatus*, McChesney, 1861, New Pal. Foss., Niagara Gr. See *L. occidentalis* and *Nautilus cancellatus* and *N. occidentalis*. If this species, as Prof. Hall suggests, is a true *Nautilus*, McChesney's name has precedence.
- capax*, Hall, 1860, Rep. of Progr. Geo. Sur. Wis. See *Nautilus capax*.
- complanatus*, Shumard, 1863, Trans. St. Louis Acad. Sci., Calciferous Gr. [Sig. smoothed.]
- convolvans*, (?) Schlotheim, 1813, in Jahrbuch, (Hall, Pal. N. Y., vol. 1) Black Riv. Gr. [Sig. wrapping together.]
- farncworthi*, Billings, 1861, Pal. Foss., vol. 1, Calciferous Gr. [Ety. proper name.]
- grafftonensis*, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Niagara Gr. [Ety. proper name.]
- hercules*, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist., Niagara Gr. Syn. for *Cyrtoceras amplicorne*. See 20th Reg. Rep. N. Y.
- imperator*, Billings, 1861, Pal. Foss., Calciferous Gr. [Sig. the chief.]
- magnificus*, Billings, 1857, (*Gyroceras magnificum*) Rep. of Progr., Hud. Riv. Gr. [Sig. magnificent.]
- marshi*, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Ety. proper name.]
- occidentalis*, Hall, 1861, Rep. of Progr. Geo. Sur. Wis., Niagara Gr. This species is now referred by Prof. Hall to the genus *Nautilus*, see 20th Reg. Rep. It was first described by McChesney, Jan. 1860, as *Cyrtoceras giganteum*, but that name being preoccupied, in 1861 he proposed *Lituites cancellatus*. If it is a *Nautilus*, the word *occidentalis* being preoccupied, McChesney's name *cancellatus* has precedence.
- ortoni*, Meek, 1873, Ohio Pal., vol. 1, Niagara Gr. [Ety. proper name.]
- palinurus*, Billings, 1862, Pal. Foss., Calciferous Gr. [Ety. mythological name.]
- pluto*, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. mythological name.]
- robertsoni*, Hall, 1861, Rep. of Progr. Wis., Chazy & Black Riv. Gr. [Ety. proper name.]
- undatus*, Emmons, 1842, (*Inachus undatus*) Geo. Rep. N. Y., Black Riv. and Trenton Gr. [Sig. wavy.]
- undatus var. occidentalis*, Hall, 1861, Rep. of Progr. Wis., Black Riv. & Trenton Gr. [Sig. western.]
- NAUTILUS, Breynius, 1732, Dissert. Polyth. [Ety. *Nautilus*, a sailor or navigator.]
- avonensis*, Dawson, 1868, Acad. Geol., Carboniferous. [Ety. proper name.]
- avus*, Barrande, 1869, Syst. Sil. de Boh., vol. 4, Quebec Gr. [Sig. an ancestor.]
- barrandi*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Ety. proper name.]
- biserialis*, Hall, 1860, Supp. to vol. 1, pt. 2, Iowa Geo. Sur., Coal Meas. [Sig. in two series.] This is probably a syn. for *N. occidentalis*.
- buccinum*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. a sea-trumpet.] This species was referred to *Gyroceras expansum*.
- calciferus*, Billings, 1865, Pal. Foss., Calciferous Gr. [Ety. from the Calciferous Group.]
- cancellatus*, McChesney, 1861, (*Lituites cancellatus*) New Pal. Foss., Niagara Gr. [Sig. cross-barred.]
- canaliculatus*, Cox, 1857, Geo. Sur. Ky., vol. 3, Coal Meas. [Sig. grooved.]
- capax*, Hall, 1860, (*Lituites capax*) Rep. of Progr. Geo. Sur. Wis., Niagara Gr. [Sig. large.]
- capax*, Meek & Worthen, 1865. This was preoccupied and must yield unless it can be retained in the subgenus *Solenocheilus*, which see.
- chesterensis*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Chester Gr. [Ety. proper name.]
- clarkanus*, Hall, 1858, Trans. Alb. Inst., vol. 4, Low. Carb. [Ety. proper name.]
- collectus*, see *Solenocheilus collectum*.
- cornulum*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. a little horn.]
- coxanus*, see *Temnocheilus coxanum*.
- decoratus*, Cox, 1857, Geo. Sur. Ky., vol. 3, Coal Meas. [Sig. decorated.]
- desertus*, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. deserted.]
- digonus*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Kinderhook Gr. [Sig. two-cornered.]
- disciformis*, see *Discites disciformis*.
- discoidal*, see *Trematodiscus discoidal*.
- divisus*, White & St. John, 1868, Trans. Chi. Acad. Sci., Up. Coal Meas. The name was preoccupied by Meyer in 1831.
- eccentricus*, Meek & Hayden, 1858, Trans. Alb. Inst., vol. 4, Permian Gr. [Ety. *ek*, from; *kentron*, center.]
- ferox*, Billings, 1865, Pal. Foss., Calciferous Gr. [Sig. fierce.]
- ferratus*, Cox, 1857, Geo. Sur. Ky., vol. 3, Coal Meas. [Sig. covered with iron.]
- forbesanus*, McChesney, 1860, Desc. New Pal. Foss., Coal Meas. [Ety. proper name.]
- gilpini*, Swallow, 1860, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]
- globatus*, Sowerby, 1825, Min. Conch., Chester Gr. [Sig. made round.]
- hercules*, Billings, 1857, Rep. of Progr. Can. Geo. Sur., Hud. Riv. Gr. [Ety. mythological name.]
- highlandensis*, see *Discites highlandensis*.
- illinoisensis*, McChesney, 1860, Desc. New Pal. Foss., Coal Meas. [Ety. proper name.]
- ingentior*, Winchell, 1862, Am. Jour. Sci., 2nd series, vol. 33, Marshall Gr. [Sig. larger, enormous.]
- insolens*, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. rare, unusual.]

- jason, Billings, 1859, Can. Nat. & Geol., vol. 4, Chazy Gr. [Ety. mythological name.]
- lasellensis, Meek & Worthen, 1866, Proc. Acad. Nat. Sci., Phil., Up. Coal Meas. [Ety. proper name.]
- latus, see *Temnocheilus latum*.
- lawsi, Swallow, 1860, Trans. St. Louis Acad. Sci., Ham. Gr. [Ety. proper name.]
- leidyi, see *Solenocheilus leidyi*.
- marcellensis, Vanuxem, 1842, (*Goniatites marcellensis*) Geo. Rep. N. Y., Ham. Gr. [Ety. proper name.]
- maximus, Conrad, 1838, (*Cyrtoceras maximus*) Ann. Rep. N. Y., Ham. Gr. [Sig. the largest.]
- meekanus, see *Trematodiscus meekanus*.
- missouriensis, Swallow, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]
- natator, Billings, 1859, Can. Nat. & Geol., vol. 4, Chazy Gr. [Sig. a swimmer.]
- niotensis, see *Temnocheilus niotense*.
- nodocarinatus, McChesney, syn. for *N. occidentalis*.
- nodoso-dorsatus, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. *nodosus*, knotty; *dorsatus*, high-backed.]
- occidentalis, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. western.]
- occidentalis, Hall, 1860, 20th Reg. Rep., Niagara Gr. This name being preoccupied, McChesney's name, *cancellatus*, has precedence. See *Lituites cancellatus*.
- oriens, Hall, 1876, Illust. Devonian Foss., Marcellus shale. [Sig. the east.]
- ornatus, Hall, 1860, 13th Reg. Rep. See *Discites ornatus*.
- permianus, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- planidorsalis, see *Trematodiscus planidorsalis*.
- planorbiformis, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. shaped like a shell of the genus *Planorbis*.]
- planovolvis, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. plane-whorled.]
- pomponius, Billings, 1862, Pal. Foss., Calceiferous Gr. [Ety. mythological name.]
- ponderosus, White, 1872, Pal. of E. Neb., Coal Meas. [Sig. heavy.]
- quadrangularis, McChesney, 1860, Desc. New Pal. Foss., Coal Meas., syn. for *N. occidentalis*.
- rockfordensis, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Kinderhook Gr. [Ety. proper name.] Probably a *Gyroceras*. See Ill. Geo. Sur., vol. 3.
- sangamonensis, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Ety. proper name.]
- seebachanus, Geinitz, 1866, Carb. und Dyas in Neb., Permian Gr. [Ety. proper name.] This species was made the type by Prof. Meek of the new genus *Pteronaulitus*, which see.
- spectabilis, see *Temnocheilus spectabile*.
- springeri, White & St. John, 1868, Trans. Chi. Acad. Sci., Coal Meas. [Ety. proper name.]
- striatulus, see *Trematodiscus striatulus*.
- subglobosus, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Chester Gr. Syn. for *N. globatus*, see Geo. Sur. Ill., vol. 3.
- subsulcatus, Phillips, 1836, Geol. York. Not clearly identified in this country.
- trigonus, see *Trematodiscus trigonus*.
- trislucatus, see *Trematodiscus trislucatus*.
- tyrans, Billings, 1859, Can. Nat. & Geol., vol. 4, Chazy Gr. [Sig. a tyrant.]
- versutus, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. complicated.]
- winslowi, see *Temnocheilus winslowi*.
- ONCOCERAS, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *onkos*, a swelling; *keras*, horn.]
- abruptum, Hall, 1861, Rep. of Progr. Wis., Trenton Gr. [Sig. abrupt.]
- alceus, Hall, 1861, Rep. of Progr. Wis., Chazy & Black Riv. Gr. [Ety. mythological name.]
- amator, Billings, 1866, Catal. Sil. Foss. Antic., Clinton Gr. [Sig. a lover.]
- clitus, Billings, 1866, Catal. Sil. Foss. Antic., Niagara Gr. [Ety. proper name.]
- constrictum, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. & Trenton Gr. [Sig. constricted.]
- corydon, Billings, 1866, Catal. Sil. Foss. Antic., Niagara Gr. [Ety. proper name.]
- dilatatum, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. spread out.]
- expansum, Hall, 1852, Pal. N. Y., vol. 2, Coralline Gr. [Sig. expanded.]
- futile, Billings, 1866, Catal. Sil. Foss. Antic., Clinton Gr. [Sig. a water jar, fusiform.]
- gibbosum, Hall, 1852, Pal. N. Y., vol. 2, Medina sandstone. [Sig. gibbous.]
- lycus, Hall, 1861, Rep. of Progr. Wis., Chazy & Black Riv. Gr. [Ety. proper name.]
- orcas, Hall, 1861, (*Cyrtoceras orcas*) Rep. of Progr. Geo. Sur. of Wis., Niagara Gr. [Ety. proper name.]
- ovoides, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. egg-like.]
- pandion, Hall, 1861, Rep. of Progr. Wis., Chazy & Black Riv. Gr. [Ety. mythological name.]
- pettiti, Billings, 1866, Catal. Sil. Foss. Antic., Niagara Gr. [Ety. proper name.]
- plebeium, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Sig. the common sort.]
- subrectum, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. nearly straight.]

- teucer, Billings, 1866, Catal. Sil. Foss. Antic., Niagara Gr. [Ety. mythological name.]
- thales, Billings, 1866, Catal. Sil. Foss. Antic., Niagara Gr. [Ety. proper name.]
- ORMOCERAS**, Stokes, 1840, Trans. Geo. Soc., 2nd series, vol. 5. [Ety. *ormos*, a chain or necklace; *keras*, horn; from the appearance of the siphuncle.]
- backi, Stokes, 1840, Trans. Geo. Soc., 2nd series, vol. 5, Clinton Gr. [Ety. proper name.]
- bayfieldi, Stokes, 1840, Trans. Geo. Soc., 2nd series, vol. 5, Clinton Gr. [Ety. proper name.]
- crebriseptum, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. having many septa.]
- (?) gracile, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. Gr. [Sig. slender.]
- moniliforme, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. [Sig. like a string of beads.]
- remotiseptum, Hall, 1850, 3rd Reg. Rep., Trenton Gr. [Sig. having distant septa.]
- tenuifilum, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. & Trenton Gr. [Sig. fine-lined.]
- tenuifilum *var.* distans, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. Gr. [Sig. distant.]
- vertebratum, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. like a back-bone.]
- whitii, Stokes, 1840, Trans. Geo. Soc., 2nd series, vol. 5, Clinton Gr. [Ety. proper name.]
- ORTHOCERAS**, Breynius, 1732, Dissert. Polyth. [Ety. *orthos*, straight; *keras*, horn.]
- abnorme, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Sig. out of the usual order.]
- abruptum, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. terminating suddenly.]
- acicula, Hall, 1843, 4th Dist. Rep. N. Y., Portage Gr. [Sig. a little needle.]
- aculeatum, Swallow, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. armed with a sharp point.]
- agea, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Ety. mythological name.]
- aequalis, Emmons, 1842, Geo. Rep. N. Y., Trenton Gr. [Sig. equal.]
- alienum, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Sig. another sort.]
- allumettense, Billings, 1857, Rep. of Progr., Chazy & Black Riv. Gr. [Ety. proper name.]
- amplameratum, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. & Trenton Gr. [Sig. large-chambered.]
- anax, Billings, 1875, Can. Nat. & Geol., Corniferous Gr. [Ety. mythological name.]
- angulatum*, (?) Wahlenberg, 1821, Nova Acta., Niagara Gr. See remarks on this species by Prof. Hall in 20th Reg. Rep.
- anellum, Conrad, 1843, Proc. Acad. Nat. Sci. Phil., Black Riv. & Trenton Gr. [Sig. a little ring.]
- annulatum, Sowerby, 1818, Min. Conch., vol. 2, Clinton & Niagara Gr. [Sig. ringed.]
- annulato-costatum*, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil., Chester Gr. [Ety. *annulatus*, ringed; *costatus*, ribbed.] This name was preoccupied by Boll in 1857.
- antenor, Billings, 1859, Can. Nat. & Geol., vol. 4, Chazy Gr. [Ety. mythological name.]
- anticostiense, Billings, 1857, Rep. of Progr., Hud. Riv. Gr. [Ety. proper name.]
- arcuatellum, Winchell, 1862, Am. Jour. Sci., 2nd series, vol. 33, Marshall Gr. [Sig. small and arched.]
- arcuoliratum, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. & Trenton Gr. [Sig. in arched ridges.]
- arenosum, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. sandy.]
- atticus, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]
- autolycus, Billings, 1862, Pal. Foss., Quebec Gr. [Ety. mythological name.]
- backi*, Stokes, 1840, Geo. Trans., 2nd ser., vol. 4, Trenton Gr. See Geo. Sur. Ill., and see *Ormoceras backi*.
- baculum, Meek, 1860, Proc. Acad. Nat. Sci., Low. Carb. [Sig. a staff or cudgel.]
- baculum*, Hall, 1862, 15th Reg. Rep., Schoharie grit. The name was preoccupied.
- balteatum, Billings, 1857, Rep. of Progr., Hud. Riv. Gr. [Sig. belted.]
- barquianum, Winchell, 1862, Am. Jour. Sci., 2nd series, vol. 33, Marshall Gr. [Ety. proper name.]
- bebryx, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Ety. proper name.]
- becki, Billings, 1859, Can. Nat. & Geol., vol. 4, Calciferous Gr. [Ety. proper name.]
- bellatulum, Billings, 1866, Catal. Sil. Foss. Antic., Clinton Gr. [Sig. pretty, neat.]
- bilineatum, Hall, 1847, Pal. N. Y., vol. 1, Chazy, Black Riv., Trenton and Hud. Riv. Gr. [Sig. double-lined.]
- bilineatum var. a*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr.
- brongiarti, Troost, 1838, (Conotubularia brongiarti) Mem. Soc. Geo. de France, 3, Low. Sil. [Ety. proper name.]
- brontes, Billings, 1866, Catal. Sil. Foss. Antic., Niagara Gr. [Ety. mythological name.]
- bucklandi, Billings, 1857, Rep. of Progr., Up. Sil. [Ety. proper name.]

- bullatum*, (?) Sowerby, 1839, Murch. Sil. Syst., Trenton Gr. [Sig. puffed up.]  
*byrnesi*, S. A. Miller, 1875, Cin. Quar. Jour. Sci., vol. 2, Cin'ti Gr. [Ety. proper name.]  
*cadmus*, Billings, 1866, Catal. Sil. Foss. Antic., Niagara Gr. [Ety. mythological name.]  
*cameolare*, McChesney, 1861, New Pal. Foss., Niagara Gr. [Ety. (?).]  
*canadense*, Billings, 1857, Rep. of Progr., Mid. Sil. [Ety. proper name.] Prof. Billings proposed this name as a substitute for *Huronina vertebralis* for the reason that *Huronina* is a syn. for *Orthoceras*, and there is one *O. vertebralis*.  
*cancellatum*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. The name was preoccupied by Eichwald in 1842.  
*capitolinum*, Safford, 1869, Geo. of Tenn., Trenton Gr. [Sig. a great tower.]  
*carleyi*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Cin'ti Gr. [Ety. proper name.]  
*catilina*, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]  
*cato*, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]  
*catullus*, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]  
*chemungense*, Swallow, 1860, Trans. St. Louis Acad. Sci., Chemung Gr. [Ety. proper name.]  
*chesterense*, Swallow, 1863, Trans. St. Louis Acad. Sci., St. Genevieve Gr. [Ety. proper name.]  
*chouteauense*, Swallow, 1860, Trans. St. Louis Acad. Sci., Chouteau Gr. [Ety. proper name.]  
*cincinnatiense*, S. A. Miller, 1875, Cin. Quar. Jour. Sci., vol. 2, Cin'ti Gr. [Ety. proper name.]  
*clathratum*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. cross-barred.]  
*clavatum*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. club-shaped.]  
*clavatum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. The name was appropriated.  
*clinocameratum*, Winchell, 1862, Am. Jour. Sci., 2d series, vol. 33, Marshall Gr. [Ety. *clino*, bent; *cameratus*, chambered.]  
*clouei*, Barrande, 1869, Syst. Sil. de Boh., 4me series, Quebec Gr. [Ety. proper name.]  
*colon*, White, 1874, Rep. Invert. Foss., Quebec Gr. [Ety. *colon*, the great intestine.]  
*colummare*, Hall, 1860, Rep. of Progr. Geo. Sur. Wis., Niagara Gr. [Sig. columnar.] The name was preoccupied by Mark. in 1857.  
*constrictum*, Conrad, 1838, Ann. Rep. N. Y., Ham. Gr. [Sig. constricted.]  
*constrictum*, Hall, see *Oncoceras constrictum*.  
*coralliferum*, Hall, 1847, Pal. N. Y., vol. 1, Utica and Hud. Riv. Gr. [Sig. bearing a coral.]  
*cornuum*, Billings, 1857, Rep. of Progr., Chazy Gr. [Sig. a horn.]  
*crebescens*, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Sig. frequent, increasing.]  
*crebristriatum*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Niagara Gr. [Sig. closely-striated.]  
*cribrosum*, Geinitz, 1866, Carb. und Dyas in Neb., Coal Meas. [Sig. full of holes, like a sieve.]  
*crotalum*, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Sig. a rattle.]  
*crocus*, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Ety. mythological name.]  
*cuvieri*, Troost, 1838, (Conotubularia *cuvieri*) Mem. Soc. Geo. de France 3, Low. Sil. [Ety. proper name.]  
*darwini*, Billings, 1868, Pal. Foss., Guelph Gr. [Ety. proper name.]  
*decrescens*, Billings, 1857, Rep. of Progr., Black Riv. and Trenton Gr. [Sig. decreasing, growing less.]  
*defranci*, Troost, 1838, (Conotubularia *defrancei*) Mem. Soc. Geo. de France 3, Low. Sil. [Ety. proper name.]  
*deparcum*, Billings, 1859, Can. Nat. & Geo., vol. 4, Calceiferous Gr. [Sig. very scarce.]  
*diffidens*, Billings, 1865, Pal. Foss., Chazy Gr. [Sig. diffident.]  
*dolatum*, Dawson, 1868, Acad. Geol., Carb. [Sig. hewed.]  
*drummondii*, Billings, 1865, Pal. Foss., Chazy Gr. [Ety. proper name.]  
*duseri*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Cin'ti Gr. [Ety. proper name.]  
*dyeri*, S. A. Miller, 1875, Cin. Quar. Jour. Sci., vol. 2, Cin'ti Gr. [Ety. proper name.]  
*edax*, Billings, 1865, Pal. Foss., Calcif. Gr. [Sig. voracious.]  
*elegantulum*, Dawson, 1860, Can. Nat. & Geo., vol. 4, Low. Sil. [Sig. elegant.]  
*emaceratum*, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. thin.]  
*epigrus*, Hall, 1858, Trans. Alb. Inst., vol. 4, Low. Carb. [Sig. a wooden pin.]  
*eriense*, Hall, 1877. The name is proposed here instead of *O. robustum*. Ham. Gr. [Ety. proper name.]  
*exile*, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Sig. small, slender.]  
*exornatum*, Dawson, 1860, Can. Nat. & Geo., vol. 5, Up. Sil. [Sig. adorned.]  
*expansum*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., St. Louis Gr. [Sig. spread out.]  
*explorator*, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. a scout, an examiner.]  
*ferum*, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. & Anticosti Gr. [Sig. wild, cruel.]  
*flavius*, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]

*foliatum*, syn. for *Cyrtoceras eugenium*.  
*formosum*, Billings, 1857, Rep. of Progr.,  
 Trenton, Hud. Riv. & Anticosti Gr.  
 [Sig. beautiful.]  
*fosteri*, S. A. Miller, 1875, Cin. Quar. Jour.  
 Sci., vol. 2, Cin'ti Gr. [Ety. proper  
 name.]  
*foxense*, Safford, 1869, Geo. of Tenn. Not  
 defined.  
*fulgur*, Billings, 1866, Catal. Sil. Foss.  
 Antic., Hud. Riv. Gr. [Sig. a thunder  
 bolt.]  
*furtivum*, Billings, 1865, Pal. Foss., Calcif.  
 Gr. [Sig. hard to find.]  
*fusiforme*, Hall, 1847, Pal. N. Y., vol. 1,  
 Black Riv. and Trenton Gr. [Sig.  
 tapering at both ends.]  
*glaucus*, Billings, 1865, Pal. Foss., Calcif-  
 erous Gr. [Ety. mythological name.]  
*goldfussi*, Troost, 1838, (Conotubularia  
 goldfussi) Mem. Soc. Geo. de France  
 3, Low. Sil. [Ety. proper name.]  
*gracilius*, Winchell, 1862, Proc. Acad.  
 Nat. Sci., Portage Gr. [Sig. more  
 slender.]  
*gregarium*, Hall, 1861, Rep. of Progr. Wis.,  
 Hud. Riv. Gr. [Sig. occurring in flocks  
 or masses.] This name was preoccu-  
 pied by Sowerby in 1839, Murch. Sil.  
 Syst.  
*hesitans*, Billings, 1865, Pal. Foss., Que-  
 bec Gr. [Sig. doubtful.]  
*hageri*, Hall, 1861, Geol. of Vermont,  
 Calciferous Gr. [Ety. proper name.]  
*halli*, S. A. Miller, 1875, Cin. Quar. Jour.  
 Sci., vol. 2, Cin'ti Gr. [Ety. proper  
 name.]  
*harperi*, S. A. Miller, 1875, Cin. Quar.  
 Jour. Sci., vol. 2, Cin'ti Gr. [Ety.  
 proper name.]  
*hastatum*, Billings, 1857, Rep. of Progr.,  
 Black Riv. and Trenton Gr. [Sig.  
 formed like a spear.]  
*helderbergiae*, Hall, 1859, Pal. N. Y., vol.  
 3, Low. Held. Gr. [Ety. proper name.]  
*heterocinctum*, Winchell, 1863, Proc.  
 Acad. Nat. Sci., Kinderhook Gr. [Sig.  
 irregularly girdled.]  
*hoyi*, McChesney, 1861, New Pal. Foss.,  
 Niagara Gr. [Ety. proper name.]  
*huronense*, Billings, 1857, Rep. of Progr.,  
 Trenton Gr. [Ety. proper name.]  
*hyas*, Hall, 1862, 15th Reg. Rep., Scho-  
 harie grit. [Ety. mythological name.]  
*imbricatum*, Sowerby, 1839, Murch. Sil.  
 Syst., Niagara Gr. [Sig. lapping over.]  
*indagator*, Billings, 1865, Pal. Foss., Cal-  
 ciferous Gr. [Sig. a diligent hunter.]  
*indianense*, Hall, 1860, 13th Reg. Rep.,  
 Ham. Gr. [Ety. proper name.]  
*infelix*, Billings, 1866, Catal. Sil. Foss.  
 Antic., Clinton Gr. [Sig. miserable,  
 useless.]  
*irregulare*, McChesney, 1861, New Pal.  
 Foss., Niagara Gr. The name was  
 preoccupied, and is a syn. for *O. wood-*  
*worthi*.

*jamesi*, Hall & Whitfield, 1875, Ohio Pal.,  
 vol. 2, Clinton Gr. [Ety. proper  
 name.]  
*jolietense*, Meek & Worthen, 1865, Proc.  
 Acad. Nat. Sci. Phil., Niagara Gr.  
 [Ety. proper name.]  
*juncum*, Hall, 1847, Pal. N. Y., vol. 1,  
 Trenton Gr. [Sig. rush-stem-like.]  
*kickapooense*, Swallow, 1858, Trans. Acad.  
 Sci. St. Louis, vol. 1, Up. Permian Gr.  
 [Ety. proper name.]  
*knoxense*, McChesney, 1860, New Pal.  
 Foss., Coal Meas. [Ety. proper name.]  
*laeve*, Hall, 1843, Geo. Rep. 4th Dist. N.  
 Y., Onondaga Gr. [Sig. smooth.]  
 The name was preoccupied by Flem-  
 ing in 1825.  
*lamarcki*, Billings, 1859, Can. Nat. & Geo.,  
 vol. 4, Calciferous Gr. [Ety. proper  
 name.]  
*lamellosum*, Hall, 1847, Pal. N. Y., vol.  
 1, Hud. Riv. Gr. [Sig. in thin plates.]  
*laphami*, McChesney, 1861, New Pal.  
 Foss., Niagara Gr. [Ety. proper  
 name.]  
*laqueatum*, Hall, 1847, Pal. N. Y., vol. 1,  
 Calciferous to Trenton Gr. [Sig.  
 adorned.]  
*laqueatum var. a*, Hall, 1847, Pal. N. Y.,  
 vol. 1, Trenton Gr.  
*laqueatum*, Hartt, 1868, Acad. Geol. The  
 name was preoccupied.  
*latiannulatum*, Hall, 1847, Pal. N. Y., vol.  
 1, Trenton Gr. [Sig. widely annu-  
 lated.]  
*lineolatum*, McChesney, 1861, New Pal.  
 Foss., Niagara Gr. The name was  
 preoccupied by Phillips in 1841.  
*longicameratum*, Hall, 1859, Pal. N. Y.,  
 vol. 3, Low. Held. Gr. [Sig. long-  
 chambered.]  
*loxias*, Hall, 1867, 20th Reg. Rep., Low.  
 Sil. [Ety. mythological name.]  
*luxum*, Hall, 1876, Illust. Devonian Foss.,  
 Schoharie grit. [Sig. dislocated.]  
*lyelli*, Billings, 1857, Rep. of Progr., Hud.  
 Riv. Gr. [Ety. proper name.]  
*magnisulcatum*, Billings, 1857, Rep. of  
 Progr., Hud. Riv. Gr. [Sig. deeply  
 furrowed.]  
*marcellense*, Vanuxem, 1842, Geo. Rep.  
 N.Y., Ham. Gr. [Ety. proper name.]  
*marginale*, Owen, 1840, Rep. on Min.  
 Lands, Up. Magnesian Gr. [Sig. marg-  
 ined.]  
*maro*, Billings, 1859, Can. Nat. & Geol.,  
 vol. 4, Chazy Gr. [Ety. proper name.]  
*marshallense*, Winchell, 1862, Am. Jour.  
 Sci., 2nd series, vol. 33, Marshall Gr.  
 [Ety. proper name.]  
*medon*, Billings, 1866, Catal. Sil. Foss.  
 Antic., Clinton Gr. [Ety. proper  
 name.]  
*medullare*, Hall, 1860, Rep. of Progr.  
 Geo. Sur. Wis., Niagara Gr. [Sig. like  
 a pith.]



- meeki, S. A. Miller, 1875, Cin. Quar. Jour. Sci., vol. 2, Cin'ti Gr. [Ety. proper name.]
- menelaus, Billings, 1862, Pal. Foss., Black Riv. Gr. [Ety. mythological name.]
- minganense, Billings, 1857, Rep. of Progr., Chazy & Black Riv. Gr. [Ety. proper name.]
- missisquoi, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]
- mohri, S. A. Miller, 1875, Cin. Quar. Jour. Sci., vol. 2, Cin'ti Gr. [Ety. proper name.]
- molestum, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. difficult.]
- moniliforme, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. [Sig. necklace-like.]
- moniliforme, Swallow, 1858, Trans. St. Louis Acad. Sci., vol. 1, Coal Meas. The name was preoccupied.
- montrealense, Billings, 1859, Can. Nat. & Geo., vol. 4, Calciferous Gr. [Ety. proper name.]
- multicameratum, Emmons, 1842, Geo. Rep. N. Y., Birdseye Gr. [Sig. many-chambered.]
- multicinctum, Hall, 1862, 15th Reg. Rep., Schoharie grit. [Sig. many-banded.]
- multicinctum, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. many-banded.] It is not clear which of these authors is entitled to his name.
- multilineatum, Emmons, 1842, Geo. Rep. N. Y., Trenton Gr. [Sig. many-lined.]
- multiseptum, Hall, 1852, Pal. N. Y., vol. 2, Medina Gr. [Sig. having many divisions.]
- murrayi, Billings, 1857, Rep. of Progr., Black Riv. and Trenton Gr. [Ety. proper name.]
- niagarense, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Ety. proper name.]
- nodocostum, McChesney, 1861, New Pal. Foss., Niagara Gr. [Ety. *nodus*, a knot; *costa*, a rib.]
- novamexicanum, Marcou, 1858, Geol. North America, Low. Carb. [Ety. proper name.]
- nummularium, (?) 1839, Murch. Sil. Syst., Up. Sil. [Sig. like a coin.]
- nuntium, Hall, 1862, 15th Reg. Rep., Ham. Gr. [Sig. news, a messenger.]
- oberon, Billings, 1866, Catal. Sil. Foss. Antic., Niagara Gr. [Ety. the king of fairies in *Midsummer Night's Dream*.]
- occidentale, Swallow, 1858, Trans. St. Louis Acad. Sci., Coal Meas., Permian Gr. [Sig. western.]
- occidentale, Winchell, 1862, Am. Jour. Sci., Marshall Gr. This name was preoccupied.
- ommanei, Salter, 1868, Bigsby, Thesaurus Siluricus, Niagara Gr. [Ety. proper name.]
- ordinatum, Billings, 1865, Pal. Foss., Calciferous Gr. [Sig. well arranged.]
- ortoni, Meek, 1872, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Ety. proper name.]
- ottawaense, Billings, 1857, Rep. of Progr., Black Riv. & Trenton Gr. [Ety. proper name.]
- ozarkense, Shumard, 1863, Trans. St. Louis Acad. Sci., Calciferous Gr. [Ety. proper name.]
- pauciseptum, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. having few septa.]
- pelops, Hall, 1862, 15th Reg. Rep., Schoharie grit. [Ety. mythological name.]
- pelops var. ohioense, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Ety. proper name.]
- perannulatum, Billings, 1857, Rep. of Progr., Hud. Riv. Gr. This name was preoccupied by Portlock in 1843. The species is now named *O. crocus*.
- perelegans, Salter, 1848, Mem. Geo. Sur. Gr. Brit., vol. 2, Ham. Gr. [Sig. very elegant.]
- perparvum, Billings, 1862, Pal. Foss., Black Riv. Gr. [Sig. very small.]
- perseus, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. mythological name.]
- persiphonatum, Billings, 1857, Rep. of Progr., Mid. Sil. [Sig. having a very large siphuncle.] If the genus *Huronina* is valid, this species will belong to it.
- perstriatum, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. many-lined.]
- perstrictum, Dawson, 1868, Acad. Geol., Carb. [Sig. very much banded.] The name was preoccupied by Barande.
- pertinax, Billings, 1860, Can. Nat. & Geo., vol. 5, Black Riv. Gr. [Sig. persistent, constant.]
- pileolum, Billings, 1866, Catal. Sil. Foss. Antic., Medina Gr. [Sig. a little cap.]
- piscator, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. a fisherman.]
- piso, Billings, 1862, Pal. Foss., Hud. Riv. Gr. [Ety. proper name.]
- planoconvexum, Hall, 1861, Rep. of Progr. Wis., Black Riv. & Trenton Gr. [Ety. *planus*, flat, plain; *convexus*, convex.]
- pressum, Rogers, 1868, Bigsby, Thesaurus Siluricus, Trenton Gr. [Sig. pressed.]
- priamus, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]
- primigenium, Vanuxem, 1842, Geo. Rep. N. Y., Calciferous Gr. [Sig. original, first born.]
- procerus, Hall, 1876, Illust. Devonian Foss., Schoharie grit. [Sig. long.]
- profundum, Hall, 1862, 15th Reg. Rep. N. Y., Up. Held. Gr. [Sig. deep.]
- propinquum, Billings, 1857, Rep. of Progr., Hud. Riv. Gr. [Sig. related to.]
- punctostriatum, Hall, 1860, Can. Nat. & Geo., vol. 5, Low. Sil. [Sig. dotted and striated.]
- pustulosum, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. covered with pustules.]



- pylades, Billings, 1866, Catal. Sil. Foss. Antic., Niagara Gr. [Ety. mythological name.]
- python, Billings, 1857, Rep. of Progr., Trenton Gr. [Ety. mythological name.]
- rapax*, see *Endoceras rapax*.
- raptor, Billings, 1866, Catal. Sil. Foss. Antic., Medina Gr. [Sig. a robber.]
- recedens, Barrande, 1869, Syst. Sil. de Boh., 4me ser., Quebec Gr. [Sig. receding.]
- rectiannulatum, Hall, 1847, Pal. N. Y., vol. 1, Chazy & Birdseye Gr. [Ety. *rectus*, straight; *annulatus*, ringed.]
- recticameratum, Hall, 1847, Pal. N. Y., vol. 1, Birdseye Gr. [Ety. *rectus*, straight; *cameratus*, chambered.]
- rectum, Worthen, 1875, Geo. Sur. Ill., vol. 6, Niagara Gr. [Sig. straight.]
- remus, Billings, 1866, Catal. Sil. Foss. Antic., Niagara Gr. [Ety. proper name.]
- repens, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. creeping.]
- reticulatum*, Phillips, 1836, Geol. York., Chemung Gr. Not clearly identified in this country.
- richardsoni*, Stokes, 1840, Trans. Geo. Soc., 2nd series, vol. 5, Black Riv. Gr. [Ety. proper name.]
- rigidum, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. rigid.]
- robustum, Winchell, 1862, Am. Jour. Sci., 2nd series, vol. 33, Marshall Gr. [Sig. robust.]
- robustum*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. The name was preoccupied. See *O. erienne*.
- rotulatum, Billings, 1857, Rep. of Progr., Niagara Gr. [Sig. rounded.]
- rude, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. rude, not polished.]
- rudicula, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. a spatula.]
- rushense, McChesney, 1860, New Pal. Foss., Coal Meas. [Ety. proper name.]
- sayi, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]
- scammoni, McChesney, 1861, New Pal. Foss., Niagara Gr. [Ety. proper name.]
- sedgwicki, Billings, 1857, Rep. of Progr., Hud. Riv. Gr. [Ety. proper name.]
- selwyni, Billings, 1862, Pal. Foss., Guelph Gr. [Ety. proper name.]
- servile, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. paltry.]
- shumardi, Billings, 1859, Can. Nat. and Geo., vol. 4, Chazy Gr. [Ety. proper name.]
- sieboldi, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. and Anticosti Gr. [Ety. proper name.]
- simpsoni, Billings, 1859, Rep. of Progr. Assiniboine & Saskatchewan Ex. Exp., Silurian. [Ety. proper name.]
- simulator, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. an imitator.]
- sordidum, Billings, 1859, Can. Nat. and Geo., vol. 4, Calciferous Gr. [Sig. coarse.]
- striatum, (?) Sowerby, 1812, Min. Conch., Devonian. [Sig. striated.]
- striatolineatum, McChesney, 1861, New Pal. Foss., Niagara Gr. [Ety. *striatus*, striated; *lineatus*, lined.] Syn. (?) for *O. medullare*.
- strigatum, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. furrowed.]
- strix, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Sig. a channel.]
- subarcuatum*, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. This name was preoccupied by Portlock in 1843.
- subbaculum*, Worthen, 1866, Geo. Sur. Ill., vol. 1, Niagara Gr. Not defined.
- subtextile, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. somewhat like net-work.]
- subulatum, Hall, 1843, 4th Dist. Geo. Rep. N. Y., Marcellus shale. [Sig. awl-shaped.]
- tenerum, Billings, 1860, Can. Nat. & Geo., vol. 5, Black Riv. Gr. [Sig. tender.]
- tenui-annulatum, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. having slight annulations.]
- tenuisepium, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. [Sig. having slender partitions.]
- teretiforme, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. long, round and smooth.]
- tetricum, Hall, 1862, 15th Reg. Rep., Schoharie grit. [Sig. rude, rough.]
- textile, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. woven, like a web.]
- thoas, Hall, 1862, 15th Reg. Rep., Schoharie grit. [Ety. mythological name.]
- tityrus, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]
- transversum, S. A. Miller, 1875, Cin. Quar. Jour. Sci., vol. 2, Cin'ti Gr. [Ety. from the transverse lines on the shell.]
- trentonense*, see *Cyrtoceras trentonense*.
- turbidum, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Cin'ti Gr. [Sig. disordered.]
- typus, Saemann, as identified by Hall, 1876, Illust. Devonian Foss., Marcellus shale. [Sig. type of the genus.]
- undulatum*, Owen, 1840, Rep. on Min. Lands, Niagara Gr. [Sig. wavy.] The name was preoccupied by Sowerby in 1812.
- undulostriatum, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. wavy-lined.]
- unionense, Worthen, 1875, Geo. Sur. Ill., vol. 6, Niagara Gr. [Ety. proper name.]
- varro, Billings, 1866, Catal. Sil. Foss. Antic., Niagara Gr. [Ety. proper name.]
- velox, Billings, 1865, Pal. Foss., Chazy Gr. [Sig. fitted for motion.]

- vertebrale*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. This name was preoccupied by Schlotheim in 1820, and by Eichwald in 1840.
- veterator, Billings, 1865, Pal. Foss., Cal-ciferous Gr. [Sig. old.]
- vindobonense, Dawson, 1868, Acad. Geol., Carboniferous. [Ety. proper name.]
- virgatum, (?) Sowerby, 1839, Murch. Sil. Syst., (Hall, Pal. N. Y., vol. 2,) Niagara Gr. [Sig. rod-like.]
- virgulatum, Hall, 1852, Pal. N. Y., vol. 2, Clinton & Niagara Gr. [Sig. like a small rod.]
- vittatum*, Sandberger. Not American.
- vulgatum, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. common.]
- whitii, Winchell, 1863, Proc. Acad. Nat. Sci., Kinderhook Gr. [Ety. proper name.]
- winchelli, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Devonian. [Ety. proper name.]
- woodworthi, McChesney, 1861, New Pal. Foss., Niagara Gr. [Ety. proper name.]
- xerxes, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]
- xiphias, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. having a point like a sword.]
- PHRAGMOCERAS, Broderip, 1839, Murch. Sil. Syst. [Ety. *phragmos*, a partition; *keras*, a horn.]
- byronense, Worthen, 1875, Geo. Sur. Ill., vol. 6, Niagara Gr. [Ety. proper name.]
- ellipticum, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Sig. elliptical.]
- expansum, Winchell, 1863, Proc. Acad. Nat. Sci., Kinderhook Gr. [Sig. expanded.]
- hector, Billings, 1862, Pal. Foss., Guelph Gr. [Ety. proper name.]
- nestor, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Ety. mythological name.]
- parvum, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Sig. small.]
- præmaturum, Billings, 1866, Can. Nat. & Geo., vol. 5, Black Riv. & Trenton Gr. [Sig. premature.]
- spinosum*, see Gyroceras spinosum.
- walshi, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Ham. Gr. [Ety. proper name.]
- PILOCERAS, Salter, 1859, Quar. Jour. Geo. Soc., vol. 15. [Ety. *pilum*, a pounder or pestle; *keras*, a horn.]
- canadense, Billings, 1860, Can. Nat. and Geol., vol. 5, Cal-ciferous Gr. [Ety. proper name.]
- gracile, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. slender.]
- triton, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. mythological name.]
- wortheni, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]
- Polycronites haani*, Troost, 1840, 5th Geo. Rep. Tenn., Devonian. Not clearly defined, but probably a Gyroceras.
- PTERONAUTILUS, Meek, 1864, Pal. of Up. Mo. [Ety. *pteron*, a wing; *Nautilus*, a genus of shells.]
- seebachanus, Geinitz, (Nautilus seebachanus) Carb. und Dyas, Permian Gr. [Ety. proper name.]
- SERICHNITES, Billings, 1866, Catal. Sil. Foss. Antic. [Ety. *sairo*, to show the teeth; *ichnos*, a footstep.] The author supposed the tracks might have been made by a species of Cephalopoda.
- abruptus, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. from the more abrupt termination and deeper impression at one end than the other.]
- SOLENOCHEILUS, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., vol. 20. [Ety. *solen*, a channel; *cheilos*, a lip.]
- capax, Meek & Worthen, 1865, (Cryptoceras capax) Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. large.]
- collectum, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., St. Louis Gr. [Sig. gathered together.]
- leidyi, Meek & Worthen, 1865, (Nautilus leidyi) Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Ety. proper name.]
- Spirula*, Lamarck, 1801, Syst. An. sans Vert.
- mortoni*, Troost, 1840, 5th Geo. Rep. Tenn., Niagara Gr. Not clearly defined.
- STREPTOCERAS, Billings, 1866, Catal. Sil. Foss. Antic. [Ety. *streptos*, twisted; *keras*, horn.]
- heros, Billings, 1866, Catal. Sil. Foss. Antic., Niagara Gr. [Ety. mythological name.]
- janus, Billings, 1866, Catal. Sil. Foss. Antic., Niagara Gr. [Ety. proper name.]
- TEMNOCHEILUS, McCoy, 1844, Synop. Carb. Foss. Ireland. [Ety. *temno*, I divide; *cheilos*, a lip.]
- coxanum, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., St. Louis Gr. [Ety. proper name.]
- latum, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. wide.]
- niotense, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Ety. proper name.]
- peramplum, Meek & Worthen, 1865, (endolobus peramplius) Proc. Acad. Nat. Sci. Phil., Chester Gr. [Sig. very large.]
- spectabile, Meek & Worthen, 1860, (Nautilus spectabilis) Proc. Acad. Nat. Sci. Phil., Chester Gr. [Sig. showy, worth seeing.]
- winslowi, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Ety. proper name.]

- TREMATODISCUS**, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil. [Ety. *trema*, a hole; *diskos*, a quoit.]
- altidorsalis*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. high-backed.]
- discoidalis*, Winchell, 1862, Am. Jour. Sci., vol. 33, 2d series, Marshall Gr. [Sig. discoidal.]
- meekanus*, Winchell, 1862, Am. Jour. Sci., 2nd series, vol. 33, Marshall Gr. [Ety. proper name.]
- planidorsalis*, Winchell, 1862, Am. Jour. Sci., 2nd series, vol. 33, Marshall Gr. [Sig. smooth-backed.]
- striatulus*, Winchell, 1862, Proc. Acad. Nat. Sci., 2nd series, vol. 33, Marshall Gr. [Sig. small-channeled.]
- strigatus*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. grooved.]
- trigonus*, Winchell, 1862, Am. Jour. Sci., 2nd series, vol. 33, Marshall Gr. [Sig. three-cornered.]
- trislucatus*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Kinderhook Gr. [Sig. three-furrowed.]
- TROCHOCERAS**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *trochos*, a hoop; *keras*, a horn.] This name was proposed by Barrande at about the same time.
- baeri*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Ety. proper name.]
- bannisteri*, Winchell & Marcy, 1865, (Gyroceras *bannisteri*) Mem. Bost. Soc. Nat. Hist., vol. 1, Niagara Gr. [Ety. proper name.]
- clio*, Hall, 1861, 14th Reg. Rep., Schoharie grit. [Ety. mythological name.]
- costatum*, Hall, 1861, Geo. Rep. of Wis., Niagara Gr. [Sig. ribbed.]
- desplaineuse*, McChesney, 1860, New Pal. Foss., Niagara Gr. [Ety. proper name.]
- discoideum*, Hall, 1862, 15th Reg. Rep., Schoharie grit. [Sig. disc-like.]
- eugenium*, Hall, 1861, 14th Reg. Rep., Schoharie grit. [Ety. proper name.]
- gebhardi*, Hall, 1852, Pal. N. Y., vol. 2, Coralline Gr. [Ety. proper name.]
- incipiens*, Barrande, 1869, Syst. Sil. de Boh., 4me ser., Quebec Gr. [Sig. beginning.]
- notum*, Hall, 1867, 20th Reg. Rep. N. Y., Niagara Gr. [Sig. well known.]
- obliquatum*, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. bent.]
- pandion*, Hall, 1876, Illust. Devonian Foss., Schoharie grit. [Ety. mythological name.]
- turbinatum*, Hall, 1852, Pal. N. Y., vol. 2, Coralline Gr. [Sig. top-shaped.]
- waldronense*, Hall, 1876, 28th Reg. Rep. N. Y., Niagara Gr. [Ety. proper name.]
- TROCHOLITES**, Conrad, 1838, Ann. Geo. Rep. N. Y. [Ety. *trochos*, a hoop; *lithos*, stone.]
- ammonius*, Conrad, 1838, Ann. Geo. Rep. N. Y., Trenton, Utica & Hud. Riv. Gr. [Ety. mythological name.]
- planorbiformis*, Conrad, 1842, Jour. Acad. Nat. Sci. Phil., Utica and Hud. Riv. Gr. [Sig. like a shell of the genus *Planorbis*.]

# CLASS LAMELLIBRANCHIATA.

- FAMILY AMBONYCHIIDÆ.—Ambonychia, Anomalodonta, Eopteria, Euchasma, Limoptera, Mytilarca.
- FAMILY ANATINIDÆ.—Allorisma, Amphicœlia, Anatina, Chænomya, Chænocardia, Clinopistha, Cuneamya, Dexiobia, Ilionia, Leptodomus, Promacrus, Prothyris, Sedgwickia.
- FAMILY ARCIDÆ.—Carbonarca, Dystactella, Macrodon, Megalomus, Megambonia, Ptychodesma, Solenomya, Tellinomya.
- FAMILY AVICULIDÆ.—Actinodesma, Avicula, Aviculopinna, Bakevellia, Entolium, Euchondria, Gervillia, Inoceramus, Leiopteris, Monopteria, Monotis, Posidonia, Posidonomya, Pseudomonotis.
- FAMILY CARDIIDÆ.—Cardiola, Cardiopsis, Cardium, Conocardium, Lunulacardium.
- FAMILY CARDIOMORPHIDÆ.—Cardiomorpha, Edmondia.
- FAMILY CYPRINIDÆ.—Astarte, Astartella, Cardinia, Cleidophorus, Cycloconcha, Cypricardella, Cypricardia, Cypricardinia, Cypricardites, Isocardia, Matheria, Pleurophorus.
- FAMILY CYTHERODONTIDÆ.—Cytherodon, Schizodus.
- FAMILY GRAMMYSIDÆ.—Grammysia.
- FAMILY LUCINIDÆ.—Axinus, Lucina, Paracyclas.
- FAMILY MODIOMORPHIDÆ.—Goniophora, Modiomorpha.
- FAMILY MYACIDÆ.—Anthracomya.
- FAMILY MYTILIDÆ.—Anodontopsis, Anthracoptera, Lithophaga, Modiola, Modiolopsis, Myalina, Mytilus.
- FAMILY NUCULIDÆ.—Nucula, Nuculana, Nuculites, Pyrenomœus, Yoldia.
- FAMILY NYASSIDÆ.—Nyassa.
- FAMILY ORTHONOTIDÆ.—Orthodesma, Orthonota.
- FAMILY OSTREIDÆ.—Lima, Ostrea, Placunopsis.
- FAMILY PALANATINIDÆ.—Palanatina.
- FAMILY PECTINIDÆ.—Aviculopecten, Lyriopecten, Pernopecten, Streblopteria.
- FAMILY PHOLADELLIDÆ.—Cimitaria, Palæoneilo, Pholadella, Phthonia.
- FAMILY PINNIIDÆ.—Pinna, Pinnopsis.
- FAMILY PTERINIIDÆ.—Pterinea, Pteronites, Pteronitella.
- FAMILY SANGUINOLITIDÆ.—Sanguinolites.
- FAMILY SOLENIDÆ.—Solen, Solenopsis.
- FAMILY TELLINIDÆ.—Sanguinolaria, Tellinopsis.
- FAMILY TRIGONIIDÆ.—Dolabra, Ischyrinia, Lyrodesma.
- FAMILY UNIONIDÆ.—Anthracosia.

ACTINODESMA, Hall, 1877, Pal. N. Y., vol. 5.  
 [Ety. *aktin*, a beam; *desma*, a ligament.]  
 cruciforme, Conrad, 1841, (Avicula cruciformis: Ann. Rep. N. Y., Ham. Gr.  
 [Sig. cross-shaped.]  
 erectum, Conrad, 1842, (Avicula erecta)  
 Jour. Acad. Nat. Sci., vol. 8, Ham. Gr.  
 [Sig. erect.]

ALLORISMA, King, 1844, Ann. Mag. Nat.  
 Hist., vol. 14. [Ety. *allos*, variable;  
*ereisma*, support, expressive of the variable nature of the cartilage support or tulerum.]  
*altirostrata*, see Sedgwickia altirostrata.  
 antiqua, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. ancient.]

- capax, Newberry, 1861, Ives' Col. Ex. Exped., Coal Meas. [Sig. capacious, large.]
- clavata, McChesney, 1860, New Pal. Foss., Chester Gr. [Sig. club-shaped.]
- cooperi, see *Chænomya cooperi*.
- costata, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. ribbed.]
- cuneata, Swallow, 1858, Trans. St. Louis Acad. Sci., Mid. Coal Meas. [Sig. wedge-shaped.]
- curta, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. short.]
- elegans, King, as identified by Geinitz. See *A. geinitzi*.
- ensiformis, Swallow, 1860, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. in the form of a sword.]
- geinitzi, Meek, 1867, Am. Jour. Sci., vol. 44, Coal Meas. [Ety. proper name.]
- granosa, Shumard, 1858, (*Leptodomus granosus*) Trans. St. Louis Acad. Sci., Coal Meas. [Sig. full of grains.]
- hannibalensis, see *Grammysia hannibalensis*.
- hybrida, Meek & Worthen, 1865, (*Chænomya hybrida*) Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. a hybrid.]
- lanceolata, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. spear-shaped.]
- lata, Swallow, 1858, Trans. St. Louis Acad. Sci., Mid. Coal Meas. [Sig. broad.]
- leavenworthensis, see *Chænomya leavenworthensis*.
- marionensis, White, 1876, Proc. Acad. Nat. Sci., St. Louis Gr. [Ety. proper name.]
- minnehaha, see *Chænomya minnehaha*.
- pleuropistha, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Waverly Gr. [Ety. *pleuron*, the side; *opisthe*, behind.]
- reflexa, Meek, 1872, Pal. E. Neb., Coal Meas. [Sig. turned back.]
- sinuata, McChesney, 1860, New Pal. Foss., Chester Gr. [Sig. wavy.]
- subcuneata, Meek & Hayden, 1858, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. somewhat wedge-shaped.]
- subelegans, Meek, 1872, Pal. E. Neb., Coal Meas. [Sig. somewhat elegant.]
- terminalis, Hall, 1852, Stans. Ex. to Gt. Salt Lake, Coal Meas. [Sig. terminal.]
- ventricosa, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Waverly Gr. [Sig. bulging out.]
- winchelli, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Waverly Gr. [Ety. proper name.]
- AMBONYCHIA, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *ambon*, the boss of a shield; *onyx*, a claw or talon.]
- acutirostra, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Sig. acute-beaked.]
- alata, see *Anomalodonta alata*.
- amygdalina, see *Cypricardites amygdalinus*.
- aphæa, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Ety. mythological name.]
- attenuata, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Sig. diminished, drawn out.]
- bellistriata, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. beautifully striated.]
- cancellosa, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Sig. made crosswise, like net work.]
- carinata, Goldfuss, 1826, (*Pterinea carinata*) Germ. Petref., Trenton & Hud. Riv. Gr. [Sig. keeled.]
- casii, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Ety. proper name.]
- costata, James, 1873, Ohio Pal., vol. 1, Cin'ti Gr. [Sig. ribbed.]
- erecta, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Sig. erect, straight.]
- illinoisensis, Worthen, 1875, Geo. Rep. Ill., vol. 6, Cin'ti Gr. [Ety. proper name.]
- intermedia, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Galena Gr. [Sig. intermediate, between *A. bellistriata* and *A. radiata*.]
- lamellosa, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Sig. made of many thin plates.]
- maxima, Safford, 1869, Geo. of Tenn. Not defined.
- mytiloides, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. [Sig. resembling a *Mytilus*.]
- neglecta, see *Amphicoelia neglecta*.
- nitida, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. neat, pretty.]
- obtus, see *Cypricardites obtusus*.
- orbicularis, Emmons, 1842, (*Pterinea orbicularis*) Geo. Rep. N. Y., Trenton Gr. [Sig. orb-shaped.]
- planistriata, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Sig. plane-striated.]
- radiata, Hall, 1847, Pal. N. Y., vol. 1, Trenton, Hud. Riv. Gr. & Mid. Sil. [Sig. radiated.]
- striæcostata, see *Pterinea striæcostata*.
- superba, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. superb, large and fine.]
- swanana, Safford, 1869, Geo. of Tenn. Not defined.
- undata, Emmons, 1842, (*Pterinea undata*) Geo. Rep. N. Y., Black Riv. & Trenton Gr. [Sig. wavy.]
- AMPHICOELIA, Hall, 1868, 20th Reg. Rep. N. Y. [Ety. *amphi*, both; *kilos*, hollow.]
- costata, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Sig. ribbed.]
- leidyi, Hall, 1867, 20th Reg. Rep. N. Y., Niagara Gr. [Ety. proper name.]
- neglecta, McChesney, 1861, (*Ambonychia neglecta*) Pal. Foss., Niagara Gr. [Sig. neglected, overlooked.]
- ANATINA, Lamarck, 1809, Phil. Zool. [Ety. pertaining to the duck, or like the duck's bill.]

- leda, Hall, 1860, 13th Reg. Rep. N. Y., Ham. Gr. [Ety. mythological name.] *sinuata*, see *Illionia sinuata*.
- ANODONTOPSIS, McCoy, 1851, Ann. & Mag. Nat. Hist., 2nd series, vol. 7. [Ety. from the resemblance to the shells of the genus *Anodonta*.]
- (?) milleri, Meek, 1871, Am. Jour. Sci., 3rd series, vol. 2, Cin'ti Gr. [Ety. proper name.]
- (?) unionoides, Meek, 1871, Am. Jour. Sci., 3rd series, vol. 2, Cin'ti Gr. [Sig. like a *Unio*.] This species is probably a *Modiolopsis*.
- ventricosa, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Sig. bulging out.]
- ANOMALODONTA, S. A. Miller, 1874, Cin. Quar. Jour. Sci., vol. 1. [Sig. anomalous-toothed.]
- alata, Meek, 1872, (Ambonychia alata) Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Sig. winged.]
- gigantea, S. A. Miller, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Sig. very large.]
- ANTHRACOMYA, Salter, 1861, Mem. Geo. Sur. Gr. Brit. [Ety. *anthrax*, coal; *Mya*, a genus of shells.]
- angulata, Dawson, 1860, (Naiadites angulata) Acadian Geology, Coal Meas. [Ety. from the angular outline of the posterior extremity.]
- arenacea, Dawson, 1860, (Naiadites arenacea) Acadian Geology, Coal Meas. [Ety. from the arenaceous shale.]
- carbonaria, Dawson, 1860, (Naiadites carbonaria) Acadian Geology, Coal Meas. [Ety. from the Coal Measures.]
- elongata, Dawson, 1860, (Naiadites elongata) Acadian Geology, Coal Meas. [Ety. from the elongation laterally.]
- lævis, Dawson, 1860, (Naiadites lævis) Acadian Geology, Coal Meas. [Sig. smooth.]
- obtusa, Dawson, 1860, (Naiadites obtusa) Acadian Geology, Coal Meas. [Ety. from the obtuse anterior end.]
- ovalis, Dawson, 1860, (Naiadites ovalis) Acadian Geology, Coal Meas. [Sig. oval.]
- ANTHRACOPTERA, Salter, 1862, Mem. Geo. Sur. Gr. Brit. [Ety. *anthrax*, coal; *pteron*, a wing.]
- carbonaria, see *Anthracomya carbonaria*.
- fragilis, Meek & Worthen, 1866, Proc. Chi. Acad. Sci., Keokuk Gr. [Sig. easily broken.]
- lævis, see *Anthracomya lævis*.
- Arca, Linne, 1758. This genus is unknown in the palæozoic rocks.
- carbonaria, Cox, 1857, Geo. Sur. Ky., vol. 3. See *Macrodon carbonarius*.
- cuspidata, Swallow, 1858, Trans. St. Louis Acad. Sci., Up. Coal Meas. [Sig. pointed.]
- modesta, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. modest, small.]
- striata, Schlotheim, as identified by Geinitz, is *Macrodon tenuistriatus*.
- punctifera, Dawson, 1868, Acad. Geol., Carb. [Sig. bearing dots.] The name was preoccupied by Deshayes in his work, 1824-1836.
- ANTHRACOSIA, King, 1844, in Mag. Nat. Hist. [Ety. *anthrax*, coal.]
- bradorica, Dawson, 1868, Acad. Geol., Carb. [Ety. proper name.]
- ASTARTE, Sowerby, 1818, Min. Conch., vol. 2. [Ety. mythological name.]
- mortonensis, Geinitz, 1866, Carb. und Dyas in Neb., Coal Meas. [Ety. proper name.]
- nebrascensis, Geinitz, 1866, Carb. und Dyas in Neb., Coal Meas. [Ety. proper name.]
- subtextilis, see *Cardiomorpha subtextilis*.
- ASTARTELLA, Hall, 1858, Geo. Rep. Iowa. [Ety. diminutive of *Astarte*.]
- concentrica, McChesney, 1860, (Edmondia concentrica) Descr. New Pal. Foss., Coal Meas. [Sig. from the concentric wrinkles or folds.]
- newberryi, Meek, 1875, Ohio Pal., vol. 2, Coal Meas. [Ety. proper name.]
- varica, McChesney, 1860, Descr. New Pal. Foss., Coal Meas. [Sig. straddling.]
- vera, Hall, 1858, Geo. Rep. Iowa, Coal Meas. [Sig. true, genuine.]
- AVICULA, Klein, 1753, Ostrac. [Ety. *avicula*, a little bird.]
- acanthoptera, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Ety. *akantha*, a spine; *pteron*, a wing.]
- acosta, Cox, 1857, Geo. Sur. Ky., vol. 3, Coal Meas. [Sig. without ribs.] The correct etymology would make this word *incosta*.
- æquilatera, see *Aviculopecten æquilaterus*.
- æquiradiata, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. having equal radiating striæ.]
- æsoopus, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Up. Sil. [Ety. proper name.]
- angustirostra, Conrad, 1842, Jour. Acad. Nat. Sci., Up. Sil. [Sig. narrow-beaked.]
- antiqua, see *Bakevellia antiqua*.
- arenaria, not American.
- aviformis, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Low. Sil. [Sig. bird-like.]
- bella, Conrad, 1841, Ann. Rep. N. Y., Devonian. [Sig. beautiful.]
- bellula, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. quite beautiful.]
- boydi, see *Pterinea boydi*.
- chemungensis, see *Pterinea chemungensis*.
- circulus, Shumard, 1855, Geo. Rep. Mo., Kinderhook Gr. [Sig. a circle.]
- communis, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. a common form.]
- cooperensis, see *Entolium cooperense*.
- corrugata, James, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Sig. wrinkled.]
- cruciformis, see *Actinodesma cruciforme*.

- custa*, (a misprint) see *Eumicrotis curta*.  
*damnoniensis*, Sowerby, as identified in the early N. Y. Reports, see *Pteronites chemungensis*.  
*decussata*, Hall, 1843, see *Pteronites decussatus*. Not Munster, 1834.  
*demissa*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Hud. Riv. Gr. [Sig. hanging down.]  
*desquamata*, see *Obolella desquamata*.  
*elliptica*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. elliptical.]  
*emacerata*, Conrad, 1842, Jour. Acad. Nat. Sci., Clinton & Niagara Gr. [Sig. made thin.]  
*erecta*, see *Actinodesma erecta*.  
*ferruginea*, Conrad, 1848, Proc. Acad. Nat. Sci., vol. 3, Up. Sil. [Sig. rusty.]  
*flabella*, see *Pterinea flabellum*.  
*fragilis*, see *Aviculopecten fragilis*. The name was preoccupied by DeFrance.  
*gebhardi*, Conrad, 1841, Ann. Rep. N. Y., Oriskany sandstone. [Ety. proper name.]  
*hermione*, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Ety. mythological name.]  
*honeymani*, Hall, 1860, Can. Nat. & Geo., vol. 5, Sil. [Ety. proper name.]  
*insueta*, Emmons, 1842, Geo. Rep. N. Y., Hud. Riv. and Cin'ti Gr. [Sig. unusual.]  
*lævis*, see *Pteronites lævis*.  
*leptonota*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Clinton Gr. [Ety. *leptos*, slender; *notos*, back.]  
*limiformis*, Hall, 1852, Pal. N. Y., vol. 2, Coralline limestone. [Sig. resembling the genus *Lima*.]  
*longa*, Geinitz, 1866, (*Gervillia longa*) Carb. und Dyas in Neb., Coal Meas. [Sig. long.]  
*longispina*, see *Pterinea longispina*.  
*magna*, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Sig. large.]  
*manticula*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Low. Held. Gr. [Sig. a little wallet.]  
*morganensis*, Meek & Worthen, 1866, (*Pterinea morganensis*) Proc. Acad. Nat. Sci., Coal Meas. [Ety. proper name.]  
*multilineata*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Chemung Gr. [Sig. many-lined.]  
*muricata*, see *Pteronites muricatus*.  
*naviformis*, Conrad, 1842, Jour. Acad. Nat. Sci., Low. Held. Gr. [Sig. boat-shaped.]  
*obliquata*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. oblique, slanting.]  
*oblonga*, see *Aviculopecten oblongus*.  
*obscura*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. obscure.]  
*orbicularis*, Stevens, 1858, Am. Jour. Sci., vol. 25, 2d ser., Coal Meas. The name was preoccupied by Sowerby in 1839.  
*orbiculata*, Hall, 1843, see *Lyriopecten orbiculatus*.  
*orbiculata*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. orbicular.]  
*parilis*, see *Aviculopecten parilis*.  
*pauciradiata*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. few-rayed.]  
*pectiniformis*, see *Aviculopecten pectiniformis*.  
*perobliqua*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. very oblique.]  
*pleuroptera*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. side-winged.]  
*protexta*, see *Pterinea protexta*.  
*quadrula*, see *Pterinea quadrula*.  
*rectalaterarea*, see *Aviculopecten rectilaterarius*.  
*reticosta*, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. having straight costæ.]  
*rhomboidea*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. lozenge-shaped.]  
*rugosa*, Conrad, 1841, Ann. Geo. Rep. N. Y., Water Lime Gr. The name was preoccupied by Munster in 1826.  
*scohariae*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]  
*securiformis*, Hall, 1852, Pal. N. Y., vol. 2, Coralline limestone. [Sig. axe-shaped.]  
*securiformis*, Hall, 1859, Pal. N. Y., vol. 3. This name was preoccupied.  
*semielliptica*, Shumard, 1858, Trans. St. Louis Acad. Sci., Up. Coal Meas. [Sig. half-elliptical.]  
*shawneensis*, Shumard, 1858, Trans. St. Louis Acad. Sci., Up. Coal Meas. [Ety. proper name.]  
*shumardi*, see *Entolium shumardi*.  
*signata*, see *Aviculopecten signatus*.  
*speciosa*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Portage Gr. [Sig. beautiful.]  
*spinigera*, see *Pteronites spinigerus*.  
*spinulifera*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. bearing spines.]  
*subaequilatera*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. somewhat equal-sided.]  
*subfalcata*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. somewhat sickle-shaped.]  
*subplana*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. somewhat flat.]  
*subquadrans*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Up. Sil. [Sig. somewhat squared.]  
*subrecta*, Conrad, 1841, Ann. Rep. N. Y., Coralline limestone. See *Pterinea subrecta*.  
*subrecta*, Hall, 1852. See *Aviculopecten subrecta*.  
*sulcata*, Geinitz, 1866, (*Gervillia sulcata*) Carb. und Dyas in Neb., Coal Meas. If this form is properly referred to the genus *Avicula*, then the name was preoccupied by Reuss in 1843.



- tenuilamellata*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. very thin-plated.]
- textilis*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. woven.]
- textilis var. arenaria*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. sandy.]
- trentonensis*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Trenton Gr. [Ety. proper name.]
- tricostata*, Vanuxem, 1842, Geo. Rep. N. Y., Chemung Gr. [Sig. three-ribbed.]
- trilobata*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Up. Sil. [Sig. three-lobed.]
- tripistriata*, Stevens, 1858, Am. Jour. Sci., vol. 25, Coal Meas. [Sig. three-lined.]
- triquetra*, Hall, 1843, Geo. Rep. N. Y., Onondaga Gr. [Sig. a triangle or three-cornered figure.]
- triradiata*, Conrad, 1842, Geo. Rep. 3rd Dist. N. Y., Portage Gr. [Sig. three-plicated.]
- tuberculata*, Conrad, 1838, Ann. Rep. N. Y., Corniferous Gr. [Sig. tuberculated.]
- umbonata*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. protuberant.]
- undata*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. wavy.]
- welchi*, James, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Ety. proper name.]
- whitii*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Ety. proper name.]
- AVICULOPECTEN**, McCoy, 1851, Ann. Mag. Nat. Hist., 2nd series, vol. 7. [Ety. *Aviculopecten*, from the resemblance to the shells of the genera *Avicula* and *Pecten*.]
- acadicus*, Hartt, 1868, Acad. Geol., Carb. [Ety. proper name.]
- acutialatus*, Swallow, 1858, (*Avicula acutialata*) Trans. St. Louis Acad. Sci., Permian Gr. [Sig. sharp-winged.]
- aequilaterus*, Hall, 1843, (*Avicula aequilatera*) Geo. Rep. 4th Dist. N. Y., Up. Held. Gr. and Marcellus shale. [Sig. equal-sided.]
- amplus*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. full, large.]
- armigerus*, Harlan, 1835, (*Pecten armigerus*) Trans. Geo. Soc. Penn., Carb. [Sig. armed.]
- aviculatus*, Swallow, 1858, (*Pecten aviculatus*) Trans. St. Louis Acad. Sci., Coal Meas. [Sig. spread out like an *Avicula*.]
- burlingtonensis*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci., Burlington Gr. [Ety. proper name.]
- cancellatus*, Hall, 1843, (*Pecten cancellatus*) Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. cancellated.]
- carboniferus*, Stevens, 1858, (*Pecten carboniferus*) Am. Jour. Sci. & Arts, Coal Meas. [Sig. from the coal formation.]
- caroli*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Ety. proper name.]
- clevelandicus*, Swallow, 1858, (*Pecten clevelandicus*) Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- coloradoensis*, Newberry, 1861, Ives' Col. Ex. Exped., Coal Meas. [Ety. proper name.]
- convexus*, Hall, 1843, (*Pecten convexus*) Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. convex.]
- cora*, Dawson, 1868, Acad. Geol., Carb. [Ety. mythological name.]
- coreyanus*, White, 1874, Rep. Invert. Foss. [Ety. proper name.]
- coxanus*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Ety. proper name.]
- crassicosatus*, Hall, 1872, 24th Reg. Rep., Up. Held. Gr. [Sig. thick-ribbed.]
- crenistriatus*, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Waverly Gr. [Sig. having crenulated striae.]
- debertanus*, Dawson, 1868, Acad. Geol., Carboniferous. [Ety. proper name.]
- dolabrimformis*, Hall, 1843, (*Pecten* (?) *dolabrimformis*) Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. resembling a mattock or pick axe.]
- duplicatus*, Hall, 1843, (*Pecten duplicatus*) Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. doubled, folded in two.]
- fragilis*, Hall, 1843, (*Avicula fragilis*) Geo. Rep. 4th Dist. N. Y., Genessee slate. [Sig. frail, easily broken.]
- glaber*, see *Pernopecten glaber*.
- gradicostus*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Chemung Gr. [Sig. ribbed in steps.]
- halli*, Swallow, 1860, (*Avicula halli*) Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]
- hertzeri*, Meek, 1875, Ohio Pal., vol. 2, Coal Meas. [Ety. proper name.]
- indianensis*, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Ety. proper name.]
- intercostalis*, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. lined between costae.]
- interlineatus*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Low. Coal Meas. [Sig. interlined.]
- konincki*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Ety. proper name.]
- limiformis*, see *Pernopecten limiformis*.
- lyelli*, Dawson, 1868, Acad. Geol., Carb. [Ety. proper name.]
- maccoyi*, Meek & Hayden, 1865, Pal., Up. Mo., Permian Gr. [Ety. proper name.]
- missouriensis*, Shumard, 1855, (*Pecten missouriensis*) Geo. Rep. Mo., St. Louis Gr. [Ety. proper name.]
- neglectus*, Geinitz, 1866, (*Pecten neglectus*) Carb. and Dyas in Neb., Coal Meas. [Sig. overlooked.]

- oblongus, Meek & Worthen, 1860, (*Avicula oblonga*) Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. oblong.]
- occidentalis, Shumard, 1855, (*Pecten occidentalis*) Geo. Rep. Mo., Carboniferous & Permian. [Sig. western.]
- occidentalis, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. This name was preoccupied.
- orbiculatus, see *Lyriopecten orbiculatus*.
- oweni, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Ety. proper name.]
- parilis, Conrad, 1842, (*Avicula parilis*) Jour. Acad. Nat. Sci. Phil., vol. 8, Cornif. Gr. [Sig. equal, like.]
- pecteniformis, Conrad, 1842, (*Avicula pecteniformis*) Jour. Acad. Nat. Sci., vol. 8, Up. Held. Gr. and Marcellus shale. [Sig. like a *Pecten*.]
- pellucidus, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. clear, transparent.]
- principes, Conrad, Ham. Gr. [Sig. principal.]
- providencensis, Cox, 1857, (*Pecten providencensis*) Geo. Sur. Ky., vol. 3, Coal Meas. [Ety. proper name.]
- rectilaterarius, Cox, 1857, (*Avicula rectilateraria*) Geo. Sur. Ky., vol. 3, Coal Meas. [Sig. straight-sided.]
- reticulatus, Dawson, 1868, Acad. Geol., Carboniferous. [Sig. reticulated.]
- ringens, Swallow, 1858, (*Pecten ringens*) Trans. St. Louis Acad. Sci., Permian Gr. [Sig. gaping.]
- rugæstriatus, Hall, 1843, (*Lima rugæstriata*) Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. having wrinkled striae.]
- sanduskyensis, syn. for *Aviculopecten parilis*.
- signatus, Hall, 1843, (*Avicula signata*) Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. marked.]
- simplex, Dawson, 1868, Acad. Geol., Carboniferous. [Sig. simple.]
- striatus, Hall, 1843, (*Pecten striatus*) Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. striated.]
- suborbicularis, Hall, 1843, (*Pterinea suborbicularis*) Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. somewhat orbicular.]
- subrectus, Conrad, 1841, (*Avicula subrecta*) Ann. Rep. N. Y., Coralline limestone. [Sig. somewhat-straight.]
- tenuicostus, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. slender-ribbed.]
- undulatus, Hall, 1877, Pal. N. Y., vol. 5, Ham. Gr. [Sig. wavy.]
- unionensis, Worthen, 1875, Geo. Sur. Ill., vol. 6, Corniferous Gr. [Ety. proper name.]
- utahensis, Meek, 1860, (*Pecten utahensis*) Proc. Acad. Nat. Sci., Coal Meas. [Ety. proper name.]
- whitei, Meek, 1872, Pal. E. Neb., Coal Meas. [Ety. proper name.]
- williamsi, Meek, 1871, Proc. Acad. Nat. Sci., Chouteau limestone. [Ety. proper name.]
- winchelli, Meek, 1875, Ohio Pal., vol. 2, Waverly Gr. [Ety. proper name.]
- AVICULOPINNA, Meek, 1867, Am. Jour. Sci., vol. 44. [Ety. from the resemblance to the genera *Avicula* and *Pinna*.]
- americana, Meek, 1867, Am. Jour. Sci., vol. 44, Coal Meas. [Ety. proper name.]
- AXINUS, Sowerby, 1821, Min. Conch., vol. 3. [Ety. *axine*, battle-axe.] This genus is unknown in palæozoic rocks.
- ovatus, see *Schizodus ovatus*.
- securis, Shumard, 1859, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. axe or hatchet-shaped.]
- BAKEVELLIA, King, 1849, Perm. Foss. [Ety. proper name.]
- antiqua, Munster, 1826, (*Avicula antiqua*) Goldfuss Germ. Petref. Not American.
- parva, Meek & Hayden, 1858, Trans. Alb. Inst., vol. 4, Permian Gr. [Sig. small.]
- (?) pulchra, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. beautiful.]
- CARBONARCA, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil. [Ety. *carbo*, coal; *Arca*, a genus of shells; from the minute teeth on the cardinal margin, as in *Arca*.]
- gibbosa, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. gibbous.]
- CARDINIA, Agassiz, 1838, in Societ. Basil. [Ety. *cardo*, the hinge of a door.]
- æquimarginalis, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. equal-margined.]
- antigonesensis, Dawson, 1868, Acad. Geol., Carb. [Ety. proper name.]
- complanata, Winchell, 1862, Proc. Acad. Nat. Sci., Portage Gr. [Sig. smoothed.]
- concentrica, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. concentric.]
- cordata, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. heart-like.]
- (?) fragilis, Cox, 1857, Geo. Sur. Ky., vol. 3, Coal Meas. [Sig. frail, easily broken.]
- occidentalis, Swallow, 1860, Trans. St. Louis Acad. Sci., Chemung Gr. [Sig. western.]
- subangulata, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. somewhat angular.]
- subangulata, Dawson, 1868, Acad. Geol. This name was preoccupied.

CARDIOLA, Broderip, 1834, Trans. Geo. Soc. [Ety. *kardia*, the heart.]  
 lincklaeni, Hall, 1877, Pal. N. Y., vol. 5, Ham. Gr. [Ety. proper name.]  
 radians, Hall, 1877, Pal. N. Y., vol. 5, Ham. Gr. [Sig. radiated.]  
 speciosa, Hall, 1877, Pal. N. Y., vol. 5, Genessee slate. [Sig. beautiful.]  
 ventricosa, Hall, 1870, Prelim. Notice Lam. shells, Goniatic limestone. [Sig. ventricose.]  
 vetusta, Hall, 1843, (*Cardium vetustum*) Geo. Rep. 4th Dist. N. Y., Portage Gr. [Sig. ancient.]  
 CARDIOMORPHA, DeKoninck, 1844, Anim. Foss. Carb. Belg. [Ety. *kardia*, heart; *morphe*, form.]  
 archiacana, Koninck, 1843, Desc. An. Foss. Belg., Carboniferous. [Ety. proper name.]  
 bellatula, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. small and beautiful.]  
 capuloides, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. resembling a shell of the genus *Capulus*.]  
 eriopia, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Ety. mytho. name.]  
 julia, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. proper name.]  
 kansasensis, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]  
 missouriensis, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]  
 modiolaris, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. like a shell of the genus *Modiola*.]  
 (?) obliquata, Meek, 1872, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Sig. oblique, slanting.]  
*ovata*, see *Dexiobia ovata*.  
 parvirostris, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. small-beaked.]  
*radiata*, see *Cardiopsis radiata*.  
 (?) *rhomboidea*, Hall, 1858, Geo. Rep. Iowa, vol. 1, pt. 2, Kinderhook Gr. See *Cardiomorpha subrhomboidea*.  
 (?) *rhomboidea*, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. rhomboidal.]  
 subglobosa, Meek, 1875, Ohio Pal., vol. 2, Waverly Gr. [Sig. somewhat globose.]  
 suborbicularis, Hall, 1840, (*Ungulina suborbicularis*) Geo. Rep. 4th Dist. N. Y., Portage Gr. [Sig. somewhat orbicular.]  
 subrhomboidea, Hall, 1877, (Proposed instead of *Cypricardites rhomboidea*, in Geo. Rep. Iowa, which was preoccupied) Kinderhook Gr. [Sig. somewhat rhomb-like.]  
 subtextilis, Hall, 1843, (*Astarte subtextilis*) Geo. Rep. 4th Dist. N. Y., Portage Gr. [Sig. somewhat woven.]  
 textilis, Hall, 1877, Pal. N. Y., vol. 5, Chemung Gr. [Sig. woven.]

triangulata, Swallow, 1860, Trans. St. Louis Acad. Sci., Chemung Gr. [Sig. three-cornered, triangular.]  
 trigonalis, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. triangular.]  
 (?) *vetusta*, see *Cypricardites vetustus*.  
 vindobonensis, Hartt, 1868, Acad. Geol., Carboniferous. [Ety. proper name.]  
 CARDIOPSIS, Meek & Worthen, 1861, Proc. Acad. Nat. Sci. Phil. [Ety. *kardia*, the heart; *opsis*, appearance.]  
 crassicostata, Hall, 1873, 24th Reg. Rep. N. Y., Schoharie grit and Corniferous limestone. [Sig. thick-ribbed.]  
 crenistriata, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. having wrinkled striae.]  
 jejuna, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. poor, contemptible.]  
 megambonata, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. having a great umbone.]  
 parvirostris, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Chemung Gr. [Sig. small-beaked.]  
 radiata, Meek & Worthen, 1860, (*Cardiomorpha radiata*) Proc. Acad. Nat. Sci. Phil., Kinderhook Gr. [Ety. from radiating striae.]  
 robusta, Hall, 1877, Pal. N. Y., vol. 5, Schoharie grit and Portage Gr. [Sig. robust.]  
 CARDIUM, Linnæus, 1758, Syst. Nat., 10th Ed. [Ety. *kardia*, the heart.]  
*iowensis*, see *Cypricardites iowensis*.  
 lexingtonense, Swallow, 1858, Trans. St. Louis Acad. Sci., Mid. Coal Meas. [Ety. proper name.]  
 napoleonense, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. proper name.]  
 (?) *vetustum*, see *Cardiola vetusta*.  
 CHÆNOCARDIA, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. [Ety. *chaino*, to gape; *kardia*, the heart.]  
 ovata, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. ovate.]  
 CHÆNOMYA, Meek, 1864, Pal. of Up. Mo. [Ety. *chaino*, to open or gape; *Mya*, a genus of shells.]  
 cooperi, Meek & Hayden, 1858, (*Panopæa cooperi*) Trans. Alb. Inst., vol. 4, Coal Meas. [Ety. proper name.]  
*hybrida*, see *Allorisma hybrida*.  
 leavenworthensis, Meek & Hayden, 1858, (*Allorisma leavenworthensis*) Proc. Acad. Nat. Sci. Phil., Coal Meas. [Ety. proper name.]  
 minnehaha, Swallow, 1858, (*Allorisma* (?) minnehaha) Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]  
 rhomboidea, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., St. Louis Gr. [Sig. rhomboidal—lozenge-shaped.]

- CIMITARIA**, Hall, 1870, Prelim. Notice Lam. shells. [Ety. from resemblance to a Cimitar.]
- corrugata*, Conrad, 1842, (Cypricardites *corrugata*) Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. corrugated.]
- elongata*, Conrad, 1841, (Cypricardites *elongatus*) Ann. Rep. N. Y., Ham. Gr. [Sig. elongated.]
- recurva*, Conrad, 1842, (Cypricardites *recurva*) Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. recurved.]
- CLEIDOPHORUS**, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *kleidos*, a clavicle; *phoros*, bearing; in allusion to the depression on the side of the cast, anterior to the beak, indicating an interior ridge in each valve.]
- concentricus*, Hall, 1860, Can. Nat. & Geo., vol. 5, Low. Sil. [Sig. marked with concentric lines.]
- concentricus*, Dawson, 1868. The name was preoccupied.
- cuneatus*, Hall, 1860, Can. Nat. & Geo., vol. 5, Low. Sil. [Sig. wedge-shaped.]
- elongatus*, Hall, 1860, Can. Nat. & Geo., vol. 5, Low. Sil. [Sig. elongated.]
- erectus*, Hall, 1860, Can. Nat. & Geo., vol. 5, Up. Sil. [Sig. erect.]
- erectus*, Dawson, 1868. The name was preoccupied.
- fabula*, Hall, 1845, Am. Jour. Sci. & Arts, vol. 43, (Nucula *fabula*) Cin'ti Gr. [Sig. a little bean.]
- macchimesyanus*, syn. for *Modiolopsis recta*.
- neglectus*, Hall, 1862, Geo. Rep. Wis., Hud. Riv. Gr. [Sig. overlooked.]
- nuculiformis*, Hall, 1860, Can. Nat. & Geo., vol. 5, Up. Sil. [Sig. like a shell of the genus *Nucula*.]
- oblongus*, Hall, 1843, (Nucula *oblonga*) Geo. Rep. 4th Dist. N. Y., Ham. Gr. [Sig. oblong.]
- planulatus*, Conrad, 1841, (Nuculites *planulatus*) Ann. Rep. N. Y., Hud. Riv. Gr. [Sig. flattened.]
- semiradiatus*, Hall, 1860, Can. Nat. & Geo., vol. 5, Low. Sil. [Sig. half-rayed.]
- solenoides*, see *Solenopsis solenoides*.
- subovatus*, Hall, 1860, Can. Nat. & Geo., vol. 5, Low. Sil. [Sig. somewhat ovate.]
- CLINOPISTHA**, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil. [Ety. *klino*, I lean; *opisthe*, backwards.]
- antiqua*, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Corniferous Gr. [Sig. ancient.]
- lævis*, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. smooth.]
- radiata*, Hall, 1858, (Edmondia *radiata*) Geo. Rep. Iowa, Coal Meas. [Sig. radiated.]
- CONOCARDIUM**, Bronn, 1835, Leth. Geo. [Ety. *konos*, a cone; *kardia*, the heart.]
- acadianum*, Hartt, 1868, Acad. Geol., Carb. [Ety. proper name.]
- æquilaterale*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. equal-sided.]
- attenuatum*, Conrad, 1842, (Pleurorhynchus *attenuatus*) Jour. Acad. Nat. Sci., vol. 8, Up. Sil. [Sig. drawn out.]
- bifarium*, Winchell, 1856, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. double.]
- blumenbachium*, see *Euchasma blumenbachi*.
- carinatum*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. keeled.]
- catastomum*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. gaping at the lower end.]
- crassifrons*, Conrad, 1842, (Pleurorhynchus *crassifrons*) Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. thick front.]
- cuneatum*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. wedge-shaped.]
- cuneus*, Conrad, 1840, (Pleurorhynchus *cuneus*) Ann. Rep. N. Y., Up. Held. Gr. [Sig. a wedge.]
- eboraceum*, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Ety. *Eboracum*, York.]
- elegantulum*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. quite handsome.]
- emmetense*, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Ety. proper name.]
- immaturum*, Billings, 1862, Pal. Foss., vol. 1, Black Riv. Gr. [Sig. immature.]
- inceptum*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. a beginning.]
- meekanum*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]
- niagarense*, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Ety. proper name.]
- obliquum*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. oblique, slanting.]
- ohioense*, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Corniferous Gr. [Ety. proper name.]
- ornatum*, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Sig. adorned.]
- prattenanum*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]
- trigonale*, Hall, 1843, (Pleurorhynchus *trigonalis*) Geo. Rep. 4th Dist. N. Y., Corniferous Gr. [Sig. triangular.]
- ventricosum*, Hall, 1860, 13th Reg. Rep. N. Y., Ham. Gr. [Sig. ventricose.]
- vomer*, Conrad, 1842, (Pleurorhynchus *vomer*) Jour. Acad. Nat. Sci., vol. 8, Devonian. [Sig. a plough-share.]
- Clenodonta*, Salter, 1851. Syn. for *Tellinomya*.
- abrupta*, see *Tellinomya abrupta*.
- angela*, see *Tellinomya angela*.
- astartiformis*, see *Tellinomya astartiformis*.
- contracta*, see *Tellinomya contracta*.
- gibberula*, see *Tellinomya gibberula*.
- hartsvillensis*, see *Tellinomya hartsvillensis*.
- hubbardi*, syn. for *Nuculites sulcatus*.
- iphigenia*, see *Tellinomya iphigenia*.
- logani*, see *Tellinomya logani*.

- Cucullæa*, Lamarck, 1801, Syst. An. [Ety. *Cucullus*, a hood.]  
*opima*, syn. for *Nucula lirata*.
- CUNEAMYA, Hall & Whitfield, 1875, Ohio Pal., vol. 2. [Ety. *cuneus*, a wedge; *Mya*, a genus of shells.]  
*miamiensis*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Cin'ti Gr. [Ety. proper name.]  
*scapha*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Cin'ti Gr. [Sig. a skiff or boat.]
- CYCLOCONCHA, S. A. Miller, 1874, Cin. Quar. Jour. Sci., vol. 1. [Ety. in allusion to the nearly circular form of the shell.]  
*mediocardinalis*, S. A. Miller, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Ety. in allusion to the position of the cardinal teeth near the middle of the hinge line.]
- CYPRICARDIA, Lamarck, 1801, Syst. An. sans Vert. [Ety. from the two genera *Cyprina* and *Cardium*.]  
*alata*, see *Modiomorpha alata*.  
*angusta*, see *Cypricardites angustus*.  
*angustata*, see *Cypricardites angustatus*.  
*chouteauensis*, Swallow, 1863, Trans. St. Louis Acad. Sci., Chemung Gr. [Ety. proper name.]  
*contracta*, see *Cypricardites contractus*.  
*indianensis*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]  
*insecta*, Dawson, 1868, Acad. Geol., Carboniferous. [Sig. cut into.]  
*leidyi*, Lea, see *Leaia leidyi*.  
*obsoleta*, see *Cypricardites obsoletus*.  
*occidentalis*, Hall, 1852, Stans. Ex. to Great Salt Lake, Coal Meas. [Sig. western.]  
*occidentalis*, Swallow, 1863, Trans. St. Louis Acad. Sci., Carb. This name was preoccupied.  
*pikensis*, Swallow, 1863, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]  
*plicatula*, Swallow, 1858, Trans. St. Louis Acad. Sci., Mid. Coal Meas. [Sig. having small plications.]  
*rhombea*, see *Cypricardites rhombeus*.  
*rigidi*, see *Sanguinolites rigidi*.  
*shumardana*, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Ety. proper name.]  
*subplana*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. somewhat flat.]  
*ventricosa*, Hall, 1860, 13th Reg. Rep. N. Y., Ham. Gr. [Sig. ventricose.]  
*wheeleri*, see *Schizodus wheeleri*.
- CYPRICARDELLA, Hall, 1858, Trans. Alb. Inst., vol. 4. [Ety. diminutive of *Cypricardia*.]  
*nucleata*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. like a kernel.]  
*oblonga*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. oblong.]  
*plicata*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. folded, plicated.]  
*subelliptica*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. somewhat elliptical.]
- CYPRICARDINIA, Hall, 1859, Pal. N. Y., vol. 3. [Ety. *Cypricardina*, from its resemblance to *Cypricardia*.]  
*arata*, Hall, 1867, 20th Reg. Rep. N. Y., Niagara Gr. [Sig. plowed.]  
*carbonaria*, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. pertaining to coal.]  
*concentrica*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. from the concentric ridges that mark the surface.]  
*crassa*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. thick, from the thick lamellæ.]  
 (?) *cylindrica*, Hall, 1872, 24th Reg. Rep. N. Y., Corniferous Gr. [Sig. cylindrical.]  
*distincta*, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Sig. distinct.]  
*dorsata*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. high-backed.]  
*indenta*, Conrad, 1842, (Cypricardites indenta) Jour. Acad. Nat. Sci., vol. 8, Up. Held. Gr. [Sig. indented.]  
*inflata*, Emmons, 1842, (Nuculites inflata) Emmons' Geo. Rep. N. Y., Trenton Gr. [Sig. swollen out, inflated.]  
*inflata var. subaequalis*, Hall, 1872, 24th Reg. Rep. N. Y., Up. Held. Gr. [Sig. valves somewhat equal.]  
*lamellosa*, Hall, 1859, Pal. N. Y., vol. 3, Up. Held. Gr. [Sig. in allusion to the distant lamellæ on the surface.]  
*planulata*, Conrad, 1842, (Pterinea planulata) Jour. Acad. Nat. Sci., vol. 8, Low. Held. Gr. [Sig. flattened.]  
*pygmæa*, Conrad, 1842, (Pterinea pygmæa) Jour. Acad. Nat. Sci., vol. 8, Up. Held. Gr. [Sig. a pigmy, very small.]  
*sublamellosa*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. somewhat lamellose; from the concentric striæ on the surface.]
- CYPRICARDITES, Conrad, 1841, Ann. Geo. Rep. N. Y. [Ety. from resemblance to the genus *Cypricardia*.]  
*acutumbonus*, Billings, 1866, (Cyrtodonta acutumbona) Catal. Sil. Foss. Antic., Anticosti Gr. [Ety. from the strongly carinated, or sharp-keeled umbones.]  
*alta*, see *Modiomorpha alta*.  
*alveatus*, Conrad, 1843, Geo. Rep. 3rd Dist. N. Y., Ham. Gr. [Sig. hollowed out.]  
*amygdalinus*, Hall, 1847, (Ambonychia amygdalina) Pal. N. Y., vol. 1, Black Riv. and Trenton Gr. [Sig. like an almond.]  
*angustus*, Hall, 1843, (Cypricardia angustata) Geo. Rep. 4th Dist. N. Y., Clinton Gr. [Sig. narrow, slender.]  
*angustatus*, see *Modiomorpha angustata*.  
*angustifrons*, syn. for *Modiolopsis modiolaris*.

- anodontoides*, see *Modiolopsis anodontoides*.
- anticostiensis*, Billings, 1866, (*Cyrtodonta* (?) *anticostiensis*) Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Ety. proper name.]
- bayfieldi*, Billings, 1858, (*Vanuxemia bayfieldi*) Can. Nat. & Geo. vol. 4, Hud. Riv. Gr. [Ety. proper name.]
- bisulcata*, see *Grammysia bisulcata*.
- breviusculus*, Billings, 1859, (*Cyrtodonta breviusculus*) Can. Nat. & Geo., vol. 4, Chazy Gr. [Sig. very short.]
- canadensis*, Billings, 1858, (*Cyrtodonta canadensis*) Can. Nat. & Geo., vol. 3, Black Riv. & Trenton Gr. [Ety. proper name.]
- carinatus*, see *Sanguinolites carinatus*.
- carinatus*, Meek, 1872, (*Dolabra carinata*) Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. This name was preoccupied.
- cariniferus*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Chemung Gr. [Sig. bearing a ridge; from the strongly carinated umbonal slope.]
- catskillensis*, see *Modiomorpha catskillensis*.
- chemungensis*, see *Sanguinolites chemungensis*.
- concentrica*, see *Modiomorpha concentrica*.
- contractus*, Hall, 1843, (*Cypricardia contracta*) Geo. Rep. 4th Dist. N. Y., Low. Carb. [Sig. contracted.]
- cordiformis*, Billings, 1858, (*Cyrtodonta cordiformis*) Can. Nat. & Geo., vol. 3, Black Riv. & Trenton Gr. [Sig. heart-shaped.]
- corrugatus*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. wrinkled.]
- curtus*, Conrad, 1841, Ann. Rep. N. Y., Cin'ti Gr. [Sig. short.]
- dixonensis*, Meek & Worthen, 1866, Proc. Chi. Acad. Sci., vol. 1, Trenton Gr. [Ety. proper name.]
- elongatus*, Conrad, 1841, Ann. Rep. N. Y., Up. Held. Gr. [Sig. elongated.]
- emma*, Billings, 1862, (*Cyrtodonta emma*) Pal. Foss., vol. 1, Hud. Riv. Gr. [Ety. proper name.]
- ferrugineus*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Clinton Gr. [Sig. of the color of rusty iron; from iron ore beds.]
- ganti*, Safford, 1869, (*Cyrtodonta ganti*) Geo. of Tenn., Trenton & Hud. Riv. Gr. [Ety. proper name.]
- hainesi*, S. A. Miller, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Ety. proper name.]
- harrietta*, Billings, 1862, (*Cyrtodonta harrietta*) Pal. Foss., vol. 1, Hud. Riv. Gr. [Ety. proper name.]
- haynanus*, Safford, 1869, (*Cyrtodonta hayniana*) Geo. of Tenn., Trenton & Hud. Riv. Gr. [Ety. proper name.]
- hindi*, Billings, 1862, (*Cyrtodonta hindi*) Pal. Foss., vol. 1, Hud. Riv. Gr. [Ety. proper name.]
- huronensis*, Billings, 1858, (*Cyrtodonta huronensis*) Can. Nat. & Geo., vol. 3, Black Riv. and Trenton Gr. [Ety. proper name.]
- inconstans*, Billings, 1858, (*Vanuxemia inconstans*) Can. Nat. & Geo., vol. 3, Chazy Gr. [Sig. changing.]
- indenta*, see *Cypricardina indenta*.
- inflatus*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Onondaga Gr. [Sig. inflated.]
- insularis*, Billings, 1866, (*Cyrtodonta insularis*) Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. belonging to an island.]
- islandicus*, Hall, 1877, (Proposed here instead of *Cypricardites ventricosus*, Hall, 1859) Low. Held. Gr. [Ety. from the type locality, St. Joseph's Island.]
- iowensis*, Owen, 1840, Rep. on Mineral lands, Calciferous Gr. [Ety. proper name.]
- latus*, Hall, 1847, (*Modiolopsis latus*) Pal. N. Y., vol. 1, Trenton Gr. [Sig. wide.]
- leucothea*, Billings, 1862, (*Cyrtodonta leucothea*) Pal. Foss., vol. 1, Black Riv. Gr. [Ety. mythological name.]
- marcellensis*, see *Lunulacardium marcellense*.
- modiolaris*, Emmons, syn. for *Modiolopsis nasuta*.
- montrealensis*, Billings, 1859, (*Vanuxemia montrealensis*) Can. Nat. & Geo., vol. 4, Chazy Gr. [Ety. proper name.]
- mytiloides*, Conrad, 1841, Ann. Rep. N. Y., Ham. Gr. [Ety. from the resemblance to *Mytilus*.]
- nasutus*, see *Modiolopsis nasuta*.
- niota*, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Ety. proper name.]
- obliquus*, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Galena Gr. [Sig. oblique, slanting.]
- oblongus*, syn. for *Modiomorpha concentrica*.
- obsoletus*, Hall, 1843, (*Cypricardia obsoleta*) Geo. Rep. 4th Dist. N. Y., Clinton Gr. [Sig. obsolete.]
- obtusus*, Hall, 1847, (*Ambonychia obtusa*) Pal. N. Y., vol. 1, Black Riv. and Trenton Gr. [Sig. obtuse.]
- ovata*, syn. for *Modiolopsis modiolaris*.
- plebeius*, Billings, 1866, (*Cyrtodonta plebeia*) Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. common.]
- ponderosus*, Billings, 1862, (*Cyrtodonta ponderosa*) Pal. Foss., vol. 1, Hud. Riv. Gr. [Sig. thick, heavy.]
- quadrilateralis*, Hall, 1867, 20th Reg. Rep. N. Y., Niagara Gr. [Sig. four-sided.]
- radiatus*, Conrad, 1841, Ann. Rep. N. Y., Ham. Gr. [Ety. from the radiating striae.]
- rectus*, Conrad, 1841, Ann. Rep. N. Y., Up. Held. Gr. [Sig. straight.]
- rectirostris*, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Sig. straight-beaked.]
- recurvus*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. recurved.]



- rhombeus, Hall, 1843, (Cypricardia rhombea) Geo. Rep. 4th Dist. N. Y., Low. Carb. [Sig. rhomboidal.]  
 rotundatus, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Sig. rounded.]  
 rugosus, Billings, 1858, (Cyrtodonta rugosa) Can. Nat. & Geo., vol. 3, Black Riv. Gr. [Sig. wrinkled.]  
*rugosa*, see Goniophora rugosa.  
 saffordi, Hall, 1852, (Palæarca saffordi) 12th Reg. Rep., Low. Held. Gr. [Ety. proper name.]  
*sectifrons*, see Phthonia sectifrons.  
 sigmoideus, Billings, 1859, (Cyrtodonta sigmoidea) Can. Nat. & Geo., vol. 3, Black Riv. Gr. [Sig. like the Greek letter Sigma.] [toides.  
*sinuata*, syn. for Modiolopsis anodon-spiniferus, Billings, 1858, (Cyrtodonta spinifera) Can. Nat. & Geo., vol. 3, Black Riv. Gr. [Sig. bearing spines.]  
 sterlingensis, Meek & Worthen, 1866, (Dolabra sterlingensis) Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Ety. proper name.]  
*subalatus*, see Modiomorpha subalata.  
 subangulatus, Hall, 1847, (Edmondia subangulata) Pal. N. Y., vol. 1, Black Riv. and Trenton Gr. [Sig. somewhat angular.]  
 subcarinatus, Billings, 1858, (Cyrtodonta subcarinata) Can. Nat. & Geo., vol. 3, Black Riv. Gr. [Sig. somewhat carinated.]  
 subspatulatus, Hall, 1847, (Modiolopsis subspatulata) Pal. N. Y., vol. 1, Black Riv. & Trenton Gr. [Sig. somewhat spatula-shaped.]  
 subtextus, Conrad, 1843, Geo. Rep. 3rd Dist. N. Y., Ham. Gr. [Sig. somewhat curved.]  
 subtruncatus, Hall, 1847, (Edmondia subtruncata) Pal. N. Y., vol. 1, Black Riv. & Trenton Gr. [Sig. somewhat truncated.]  
*truncatus*, see Sanguinolites truncatus.  
 ungulatus, Billings, 1866, (Cyrtodonta ungulata) Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. having claws.]  
 ventricosus, Hall, 1847, (Edmondia ventricosa) Pal. N. Y., vol. 1, Trenton Gr. [Sig. bulging out.]  
*ventricosus*, Hall, 1859, (Palæarca ventricosa) Pal. N. Y., vol. 3, Low. Held. Gr. This name was preoccupied. See Cypricardites islandicus.  
 vetustus, Hall, 1847, (Cardiomorpha vetusta) Pal. N. Y., vol. 1, Trenton Gr. [Sig. ancient.]  
 winchelli, Safford, 1869, (Cyrtodonta winchelli) Geo. Tenn., Trenton and Hud. Riv. Gr. [Ety. proper name.]  
*Cyrtodonta*, syn. for Cypricardites.  
*acutumbona*, see Cypricardites acutum-bonus.  
*anticostiensis*, see C. anticostiensis.  
*breviscula*, see C. brevisculus.  
*canadensis*, see C. canadensis.  
*cordiformis*, see C. cordiformis.  
*emma*, see C. emma.  
*ganti*, see C. ganti.  
*harrietta*, see C. harrietta.  
*hayniana*, see C. haynana.  
*hindi*, see C. hindi.  
*huronensis*, see C. huronensis.  
*insularis*, see C. insularis.  
*leucothea*, see C. leucothea.  
*normanensis*, Safford. Not defined.  
*plebeia*, see Cypricardites plebeius.  
*ponderosa*, see C. ponderosus.  
*rugosa*, see C. rugosus.  
*saffordi*, see C. saffordi.  
*sigmoidea*, see C. sigmoideus.  
*spinifera*, see C. spiniferus.  
*subcarinata*, see C. subcarinatus.  
*ungulata*, see C. ungulatus.  
*winchelli*, see C. winchelli.  
 CYTHERODON, Hall, 1873, in 23rd Reg. Rep. N. Y. [Ety. *Cythere*, a genus of shells; *odous*, a tooth.]  
 appressus, Conrad, (Nuculites appressa) 1842, Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. pressed together.]  
 (?) placidus, Billings, 1874, Pal. Foss., vol. 2, Up. Sil. [Sig. smooth.]  
 socialis, Billings, 1874, Pal. Foss., vol. 2, Up. Sil. [Sig. social, clustered together.]  
 tumidus, Hall, 1870, (Schizodus tumidus) Prelim. Notice Lam. shells, etc., Up. Held. Gr. [Sig. swollen, tumid.]  
 DEXIOBIA, Winchell, 1863, Proc. Acad. Nat. Sci. [Ety. *dexios*, on the right side; *bia*, strength.]  
 halli, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Ety. proper name.]  
 ovata, Hall, 1858, (Cardiomorpha ovata) Geo. Rep. Iowa, Kinderhook Gr. [Sig. ovate.]  
 whitel, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Ety. proper name.]  
 DOLABRA, McCoy, 1844, Syn. Carb. Foss. Ireland. [Ety. *dolabra*, a mattock or pick axe.]  
 alpina, Hall, 1858, Geo. Rep. Iowa, Coal Meas. [Sig. alpine.]  
*carinata*, see Cypricardites carinatus.  
*sterlingensis*, see Cypricardites sterlingensis.  
 DYSTACTELLA, Hall, 1877, Pal. N. Y., vol. 5. [Ety. *dystaktos*, hard to arrange.]  
 subnasuta, Hall, 1877, Pal. N. Y., vol. 5, Up. Held. Gr. [Sig. somewhat nasute.]  
 EDMONDIA, DeKoninck, 1844, Desc. Anim. Foss., Carb. Belg. [Ety. proper name.]  
 anomala, Dawson, 1868, Acad. Geo., Carb. [Sig. irregular, out of order.]  
 aspenwallensis, Meek, 1871, Hayden's Rep. Sur. Wyoming, Coal Meas. [Ety. proper name.]  
 bicarinata, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. double-keeled.] Prof. Hall regards this as a syn. for *Sanguinolites rigidus*.



- binumbonata, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. having double umbones.]
- burlingtonensis, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Ety. proper name.]
- calhouni, see *Pleurophorus calhouni*.
- concentrica, see *Astartella concentrica*.
- depressa, Hall, 1870, Prelim. Notice Lam. shells, Waverly Gr. [Sig. depressed.]
- elliptica, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. elliptical.]
- gibbosa, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. gibbous, tumid.]
- glabra, Meek, 1872, Pal. E. Neb., Coal Meas. [Sig. smooth.]
- hartii, Dawson, 1868, Acad. Geol., Carb. [Ety. proper name.]
- hawni, Swallow, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]
- inlesi, Winchell & Marcy, 1865, Proc. Bost. Soc. Nat. Hist., Niagara Gr. [Ety. proper name.]
- ledoides, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. resembling a shell of the genus *Leda*.]
- mactroides, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. resembling a shell of the genus *Mactra*.]
- marionensis, Swallow, 1860, Trans. St. Louis Acad. Sci., Chemung Gr. [Ety. proper name.]
- nebrascensis, Geinitz, 1866, Carb. und Dyas in Neb., Coal Meas. [Ety. proper name.]
- nilesi, Winchell & Marcy, 1865, Proc. Bost. Soc. Nat. Hist., Niagara Gr. [Ety. proper name.]
- nitida, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. smooth, neat.]
- nuptialis, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. nuptial.]
- otoensis, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- peroblonga, Meek & Worthen, 1866, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. somewhat oblong.]
- philipi, Hall, 1870, Prelim. Notice Lam. shells, Chemung Gr. [Ety. proper name.]
- radiata, see *Clinopistha radiata*.
- reflexa, Meek, 1872, Pal. E. Neb., Coal Meas. [Sig. turned back, reversed.]
- rhomboidea, Hall, 1877, Pal. N.Y., vol. 5, Chemung Gr. [Sig. rhomboidal.]
- semiorbiculata, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. half orb-shaped.]
- strigillata, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. furrowed.]
- subangulata, see *Cypricardites subangulatus*.
- subtruncata, Hall, 1847, see *Cypricardites subtruncatus*.
- subtruncata, Meek, 1872, Pal. E. Neb., Coal Meas. [Sig. somewhat truncated.]
- tapetiformis, Meek, 1875, (E. tapesiformis) Ohio Pal., vol. 2, Waverly Gr. [Ety. *tapet*, a carpet; *formis*, like.]
- undulata, Hall, 1870, Prelim. Notice Lam. shells, Chemung Gr. [Sig. undulated.]
- unioniformis, Phillips, 1836, (Isocardia unioniformis) Geol. Yorkshire, vol. 2, Carboniferous. [Sig. resembling the shell of the genus *Unio*.]
- ventricosa, Hall, see *Cypricardites ventricosus*.
- ENTOLIUM, Meek, 1864, Cal. Geo. Sur., vol. 2. [Ety. *entos*, inside; *leion*, smooth.]
- avicula, Swallow, 1858, (Pecten aviculus) Trans. St. Louis Acad. Sci., Coal Meas. [Sig. like a shell of the genus *Avicula*.]
- cooperensis, Shumard, 1855, (Avicula cooperensis) Low. Carb. [Ety. proper name.]
- EOPTERIA, Billings, 1865, Pal. Foss., vol. 1. [Ety. *eos*, dawn; *pteron*, a wing.] Prof. Billings says if *Euchasma* is the same as *Eopteria*, then he desires *Eopteria* to be withdrawn from science.
- (?) ornata, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. adorned.]
- richardsoni, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]
- typica, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. type of the genus.]
- EUCHASMA, Billings, 1865, Pal. Foss., vol. 1. [Ety. *eu*, well; *chasma*, a hollow.]
- blumenbachi, Billings, 1859, (Conocardium blumenbachi) Can. Nat. & Geo., vol. 4, Quebec Gr. [Ety. proper name.]
- EUCHONDRIA, Meek, 1874, Am. Jour. Sci., 3rd series, vol. 7, a subgeneric name proposed for *Aviculopecten neglectus*, on account of its peculiar hinge line.
- Eumicrotis*, syn. for *Pseudomonotis*.
- curta*, see *Pseudomonotis curta*.
- hawni*, see *Pseudomonotis hawni*.
- hawni* var. *ovata*, see *Pseudomonotis hawni* var. *ovata*.
- hawni* var. *sinuata*, see *Pseudomonotis hawni* var. *sinuata*.
- Exochorhynchus*, Meek, 1864, Pal. Up. Mo. [Ety. *exochos*, prominent; *rhynchos*, beak.] This name was suggested as a probable genus or subgenus to include *Sedgwickia altirostrata*.
- GERVILLIA, DeFrance, 1820, Dict. Sci. Nat., xviii. [Ety. proper name.] This genus is probably unknown in the palæozoic rocks.
- auricula, Stevens, 1858, Am. Jour. Sci., vol. 25, Coal Meas. [Sig. the ear lap.]
- longa, see *Avicula longa*.
- longispina, see *Monopteria longispina*.

- strigosa*, White, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Chemung Gr. [Sig. lean, thin.] This species may belong to the genus *Bakevella*.
- sulcata*, see *Avicula sulcata*.
- GONIOPHORA**, Phillips, 1848. [Ety. *gonia*, an angle; *phoros*, bearing.] *Goniophorus* was used by Agassiz for a genus of Echinoderms in 1840.
- acuta*, Hall, 1877, Pal. N. Y., vol. 5, Ham. Gr. [Sig. acute.]
- bellula*, Billings, 1874, Pal. Foss., vol. 2, Up. Sil. [Sig. small and beautiful.]
- consimilis*, Billings, 1874, Pal. Foss., vol. 2, Up. Sil. [Sig. very like, just such another.]
- glabra*, Hall, 1877, Pal. N. Y., vol. 5, Chemung Gr. [Sig. smooth.]
- hamiltonensis*, Hall, 1870, (*Sanguinolites hamiltonensis*) Prelim. Notice Lam. Shells, Ham. Gr. [Ety. proper name.]
- mediocris*, Billings, 1874, Pal. Foss., vol. 2, Up. Sil. [Sig. middling.]
- perangulata*, Hall, 1877, Pal. N. Y., vol. 5, Up. Held. Gr. [Sig. very angular.]
- rugosa*, Conrad, 1841, (*Cypricardites rugosa*) Ann. Rep. N. Y., Ham. Gr. [Sig. wrinkled.]
- transiens*, Billings, 1874, Pal. Foss., vol. 2, Up. Sil. [Sig. transient, passing.]
- GRAMMYSIA**, DeVerneuil, 1847, Bull. Soc. Geo. France. [Ety. *gramme*, a line of writing; *Mys*, a mussel shell, in allusion to the transverse furrows which cross the valves from the umbones to the middle of the ventral margin.]
- acadica*, Billings, 1874, Pal. Foss., vol. 2, Up. Sil. [Ety. proper name.]
- alveata*, Conrad, 1841, (*Posidonia alveata*) Ann. Rep. N. Y., Ham. Gr. [Sig. hollowed out.]
- arcuata*, Conrad, 1841, (*Posidonia arcuata*) Ann. Rep. N. Y., Ham. Gr. [Sig. arched.]
- bisulcata*, Conrad, 1838, (*Pterinea bisulcata*, 1841,) (*Cypricardites bisulcata*) Ann. Rep. N. Y., Ham. Gr. [Sig. two-furrowed.]
- canadensis*, Billings, 1874, Pal. Foss., vol. 2, Up. Sil. [Ety. proper name.]
- chemungensis*, Pitt, 1874, Buff. Soc. Nat. Hist., Chemung Gr. [Ety. proper name.]
- circularis*, Hall, 1870, Prelim. Notice Lam. shells, Ham. and Chemung Gr. [Sig. circular.]
- constricta*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. constricted.]
- elliptica*, Hall, 1870, Prelim. Notice Lam. shells, Chemung Gr. [Sig. elliptical.]
- erecta*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. erect.]
- globosa*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. globose.]
- hamiltonensis*, syn. for *G. bisulcata*.
- hannibalensis*, Shumard, 1855, (*Allorisma hannibalensis*) Geo. Sur. Mo., Kinderhook Gr. [Ety. proper name.]
- lirata*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. furrowed.]
- magna*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. large.]
- nodocostata*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. having nodes on the ribs.]
- obsoleta*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. obsolete.]
- parallela*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. parallel.]
- præcursor*, Hall, 1870, Prelim. Notice Lam. shells, Schoharie grit. [Sig. a fore-runner.]
- remota*, Billings, 1874, Pal. Foss., vol. 2, Up. Sil. [Sig. remote.]
- rhomboidalis*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Ham. Gr. [Sig. rhomboidal.]
- rhomboides*, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Waverly Gr. [Sig. rhomb-like.]
- rustica*, Billings, 1874, Pal. Foss., vol. 2, Up. Sil. [Sig. rough, rustic.]
- secunda*, Hall, 1870, Prelim. Notice Lam. shells, Up. Held. Gr. [Sig. following.]
- subarcuata*, Hall, 1870, Prelim. Notice Lam. shells, Chemung Gr. [Sig. somewhat like *G. arcuata*.]
- ventricosa*, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Waverly Gr. [Sig. ventricose.]
- Gryphorhynchus*, Meek, 1864, Am. Jour. Sci. Not defined.
- ILIONIA**, Billings, 1875, Can. Nat. & Geol. [Ety. proper name.]
- canadensis*, Billings, 1875, Can. Nat. & Geol., Corniferous Gr. [Ety. proper name.]
- sinuata*, Hall, 1859, (*Anatina sinuata*) Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. wavy.]
- Inoceramus*, Sowerby, 1818, Min. Conch., vol. 2. This genus is unknown in American palæozoic rocks.
- chemungensis*, see *Mytilarca chemungensis*.
- mytilimeris*, see *Mytilarca mytilimeris*.
- oviformis*, see *Mytilarca oviformis*.
- ISCHYRINIA**, Billings, 1866, Catal. Sil. Foss. Antic. [Ety. *ischyros*, strong.]
- plicata*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. folded.]
- winchelli*, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Ety. proper name.]
- Isocardia*, Klein, 1753, Tent. Meth. Ostr. [Ety. *isos*, like; *kardia*, the heart.] This is an existing littoral genus that burrows in the sand. It is not known in the palæozoic rocks.
- (?) *curta*, Shumard, 1858, Trans. St. Louis Acad. Nat. Sci., Chemung Gr. [Sig. short.]
- jennæ*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Ety. proper name.]
- unioniformis*, see *Edmondia unioniformis*.

- Leda*, Schumacher, 1817, syn. for *Nuculana*.  
*barrisi*, see *Palæoneilo barrisi*.  
*bellistriata*, see *Nuculana bellistriata*.  
*brevirostris*, see *Nuculana brevirostris*.  
*curta*, see *Nuculana curta*.  
*dens-mamillata*, see *Nuculana dens-mamillata*.  
*gibbosa*, see *Yoldia gibbosa*.  
*knoxensis*, see *Yoldia knoxensis*.  
*levistriata*, see *Yoldia levistriata*.  
*nuculiformis*, see *Nuculana nuculiformis*.  
*oweni*, see *Yoldia oweni*.  
*pandoriformis*, see *Nuculana pandoriformis*.  
*polita*, see *Nuculana polita*.  
*rushensis*, see *Yoldia rushensis*.  
*saccata*, see *Nuculana saccata*.  
*subscitula*, see *Yoldia subscitula*.
- LEIOPTERIS**, Hall, 1877, Pal. N. Y., vol. 5. [Ety. *leios*, smooth; *pteron*, a wing.] A proposed genus in the family *Aviculidae*.
- LEPTODOMUS**, McCoy, 1844, Synopsis Carb. Foss. Ireland. [Ety. *leptos*, slender; *domus*, house.]  
*arata*, Hall, 1860, Can. Nat. & Geo., vol. 5, Silurian. [Sig. furrowed.]  
*canadensis*, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Ety. proper name.]  
*clavata*, Winchell, 1862, Proc. Acad. Nat. Sci., Portage Gr. [Sig. club-shaped.]  
*granosus*, see *Allorisma granosum*.  
*topekaensis*, see *Sedgwickia topekaensis*.
- LIMA**, Bruguiere, 1791, Encycl. Meth. and Deshayes, 1824, Descrip. de Coquilles fossiles des environs de Paris. [Ety. *lima*, a file.]  
*glabra*, see *Pernopecten glaber*.  
*macroptera*, see *Limoptera macroptera*.  
*obsoleta*, see *Pernopecten obsoletus*.  
*retifera*, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. net-bearing.]  
*rugæstriata*, see *Aviculopecten rugæstriatus*.
- LIMOPTERA**, Hall, 1870, Prelim. Notice Lam. shells, Up. Held. Gr. [Ety. *Lima*, a genus of shells; *pteron*, a wing.]  
*cancellata*, Hall, 1870, Prelim. Notice Lam. shells, Up. Held. Gr. [Sig. cancellated.]  
*curvata*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. curved.]  
*macroptera*, Conrad, 1838, (Lima macroptera) Ann. Rep. N. Y., Ham. Gr. [Sig. long-winged.]  
*obsoleta*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. obsolete.]  
*pauperata*, Hall, 1870, Prelim. Notice Lam. shells, Up. Held. Gr. [Sig. poor.]  
*triquetra*, Conrad, Ham. Gr. [Sig. a triangle.]
- LITHOPHAGA**, Lamarck, 1812, Hist. An. sans Vert. [Ety. *lithos*, stone; *phago*, I eat.]  
*lingualis*, Phillips, 1836, (Modiola lingualis) Geol. Yorkshire, vol. 2, Keokuk Gr. [Sig. tongue-like.]  
*pertenuis*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., St. Louis Gr. [Sig. very slender.]
- LUCINA**, Bruguiere, 1792, Encyclop. Meth. [Ety. mythological name.]  
*elliptica*, see *Paracyclas elliptica*.  
*elliptica* var. *occidentalis*, see *Paracyclas elliptica* var. *occidentalis*.  
*hamiltonensis*, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Ety. proper name.]  
*lirata*, see *Paracyclas lirata*.  
*occidentalis*, Billings, 1859, Assiniboine & Saskatchewan Ex. Exped., Devonian. This name was preoccupied by Conrad for an Eocene species.  
*ohioensis*, see *Paracyclas ohioensis*.  
*retusa*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Portage Gr. [Sig. blunt.]
- LUNULACARDIUM**, Munster, 1840, Beitrage zur Petrefaktenkunde. [Ety. *lunula*, a little moon; *Cardium*, a genus of shells.]  
*acutirostrum*, Hall, 1843, (Pinnopsis acutirostra) Geo. Rep. 4th Dist. N. Y., Portage Gr. [Sig. acute-beaked.]  
*curtum*, Hall, 1870, Prelim. Notice Lam. shells, Up. Held. Gr. [Sig. short.]  
*fragilis*, Hall, 1877, Pal. N. Y., vol. 5, Ham. Gr. [Sig. frail.]  
*marcellense*, Vanuxem, 1843, (Cypricardites marcellensis) Geo. Rep. 3rd Dist. N. Y., Marcellus shale. [Ety. proper name.]  
*ornatum*, Hall, 1843, (Pinnopsis ornata) Geo. Rep. 4th Dist. N. Y., Portage Gr. [Sig. adorned.]
- Lyonsia*, Turton, 1822. Not found in palæozoic rocks.  
*concava*, see *Sedgwickia concava*.
- LYRIOPECTEN**, Hall, 1877, Pal. N. Y., vol. 5. [Ety. *lyrion*, a lyre; *Pecten*, a genus of shells.]  
*anomiaeformis*, Hall, 1877, Pal. N. Y., vol. 5, Up. Held. Gr. [Sig. like a shell of the genus *Anomia*.]  
*macrodonta*, Hall, 1877, Pal. N. Y., vol. 5, Up. Held. Gr. [Sig. from the large teeth-like ridges.]  
*orbiculatus*, Hall, 1843, (Avicula orbiculata) Geo. Rep. 4th Dist. N. Y., Ham. Gr. [Sig. orbicular.]  
*parallelodonta*, Hall, 1877, Pal. N. Y., vol. 5, Up. Held. Gr. [Sig. from the broad straight hinge line.]
- LYRODESMAS**, Conrad, 1841, Ann. Geo. Rep. N. Y. [Ety. *lyra*, a harp; *desma*, a ligament.]  
*cincinnatiense*, Hall, 1871, Pamphlet, Cin'ti Gr. [Ety. proper name.]  
*planum*, Conrad, 1841, Ann. Geo. Rep., Hud. Riv. Gr. [Ety. *planus*, flat.]  
*poststriatum*, Emmons, 1842, (Nuculana poststriata) Geo. Rep. N. Y., Black Riv. Gr. [Ety. striated posteriorly.]  
*pulchellum*, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Ety. *pulchellus*, beautiful.]

**MACRODON**, Lycett, 1845, Murch. Geo. Chelt.

[Ety. *macro*, long; *odous*, a tooth.]

carbonarius, Cox, 1857, (Arca carbonarius) Geo. Sur. Ky., vol. 3, Coal Meas. [Sig. pertaining to coal.]

chemungensis, Hall, 1870, Prelim. Notice Lam. Shells, Chemung Gr. [Ety. proper name.]

cochlearis, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. spoon-shaped.] Prof. Hall suggests that it is a syn. for *M. parvus*.

curtus, Dawson, 1868, Acad. Geol., Carb. [Sig. short.]

delicatus, Meek & Worthen, 1870, Proc. Acad. Nat. Sci., Coal Meas. [Sig. delicate.]

hamiltoniae, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Ety. proper name.]

hardingi, Dawson, 1868, Acad. Geol., Carb. [Ety. proper name.]

micronema, Meek & Worthen, 1866, Proc. Acad. Nat. Sci., Chester Gr. [Sig. a small thread.]

obsoletus, Meek, 1871, Reg. Rep. University W. Va., Coal Meas. [Sig. obsolete.]

ovatus, Hall, 1870, Prelim. Notice Lam. shells, Waverly Gr. [Sig. ovate.]

parvus, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. small.]

shubenacadiensis, Dawson, 1868, Acad. Geo., Carb. [Ety. proper name.]

tenuistriata, Meek & Worthen, 1867, Proc. Acad. Nat. Sci., Coal Meas. [Sig. finely-lined.]

**MATHERIA**, Billings, 1858, Can. Nat. & Geo., vol. 3. [Ety. proper name.]

tenera, Billings, 1858, Can. Nat. & Geo., vol. 3, Trenton Gr. [Sig. tender, delicate.]

**MEGALOMUS**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *megale*, great; *omos*, shoulder.]

canadensis, Hall, 1852, Pal. N. Y., vol. 2, Guelph Gr. [Ety. proper name.]

**MEGAMBONIA**, Hall, 1859, Pal. N. Y., vol. 3. [Ety. *mega*, great; *ambon*, the boss of a shield.]

aviculoidea, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. like an *Avicula*.]

bellistriata, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. beautifully striated.]

cancellata, Hall, 1860, Can. Nat. & Geo., vol. 5, Silurian. [Sig. cancellated.]

cardiiformis, Hall, 1843, (Pterinea cardiiformis) Geo. Rep. 4th Dist. N. Y., Cornif. Gr. [Sig. like a *Cardium*.]

cordiformis, see *Mytilarca cordiformis*.

jamesi, Meek, 1872, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Ety. proper name.]

This shell probably belongs to the genus *Ambonychia*.

lamellosa, Hall, 1859, Pal. N. Y., vol. 3, Oriskany sandstone. [Sig. made of thin plates.]

lata, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. wide, expanded on the posterior slope.]

*lyoni*, syn. for *Cardiopsis radiata*.

mytiloidea, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. like the *Mytilus*.]

oblonga, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. oblong.]

obscura, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. characters obscure.]

*ovata*, syn. for *Mytilarca mytilimeris*.

ovoidea, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. ovoidal.]

rhomboidea, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. rhomboidal.]

spinneri, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]

striata, Hall, 1860, Can. Nat. & Geo., vol. 5, Silurian. [Sig. striated.]

subcordiformis, Hall, 1877, Pal. N. Y., vol. 5, Up. Held. Gr. [Sig. somewhat like *M. cordiformis*.]

suborbicularis, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. somewhat orbicular.]

*Megaptera*, Meek & Worthen, 1866. The name was preoccupied.

*Microdon*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8. This name was applied by Agassiz to a genus of fish in 1833, and was also preoccupied for a genus of insects.

*bellistriata*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. beautifully lined.]

*complanatus*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. smoothed.]

*gregaria*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. gregarious.]

*reservatus*, Hall, 1870, Prelim. Notice Lam. shells, Waverly Gr. [Sig. preserved.]

*tenuistriata*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. finely lined.]

**MODIOLA**, Lamarck, 1801, Syst. An. sans Vert. [Ety. *modiolus*, a small measure or drinking vessel.]

avonia, Dawson, 1868, Acad. Geol., Low. Carb. [Ety. proper name.]

*concentrica*, see *Modiomorpha concentrica*.

*lingualis*, see *Lithophaga lingualis*.

metella, Hall, 1870, Prelim. Notice Lam. shells, Chemung Gr. [Ety. proper name.]

minor, Lea, 1852, Jour. Acad. Nat. Sci., 2nd series, vol. 2, Coal Meas. [Sig. less.]

*obtusa*, see *Modiolopsis obtusa*.

pooli, Dawson, 1868, Acad. Geol., Low. Carb. [Ety. proper name.]

præcedens, Hall, 1870, Prelim. Notice Lam. shells, Chemung Gr. [Sig. surpassing, going before.]

wyomingensis, Lea, 1852, Jour. Acad. Nat. Sci., 2d series, vol. 2, Coal Meas. [Ety. proper name.]

*MODIOLOPSIS*, Hall, 1847, Pal. N. Y., vol. 1. [Ety. *Modiola*, a genus of shells; *opsis*, appearance; from its resemblance to *Modiola*.]  
*adrasia*, Billings, 1862, Pal. Foss., vol. 1, Black Riv. Gr. [Ety. mythological name.]  
*anodontoides*, Conrad, 1847, (Cypricardites *anodontoides*) Pal. N. Y., vol. 1, Hud. Riv. Gr. [Ety. from its resemblance to the genus *Anodonta*.]  
*arcuata*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. bent, bow-shaped.]  
*aviculoides*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. resembling an *Avicula*.]  
*carinata*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. keeled.]  
*cincinnatiensis*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Cin'ti Gr. [Ety. proper name.]  
*concentrica*, Hall & Whitfield, 1872, Ohio Pal., vol. 2, Cin'ti Gr. [Sig. concentric.]  
*curta*, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. short.]  
*dicteus*, Hall, 1867, 20th Reg. Rep. N. Y., Niagara Gr. [Ety. mythological name.]  
 (?) *dobia*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. doubtful.]  
*exilis*, Billings, 1874, Pal. Foss., vol. 2, Up. Sil. [Sig. slender.]  
*faba*, Conrad, 1842, in Emmons' Geo. Rep. N. Y., Black Riv., Trenton and Hud. Riv. Gr. [Sig. a bean.]  
*gesneri*, Billings, 1862, Pal. Foss., vol. 1, Trenton and Black Riv. Gr. [Ety. proper name.]  
*latus*, see Cypricardites *latus*.  
*maia*, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Ety. mythological name.]  
*meyeri*, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Ety. proper name.]  
*modiolaris*, Conrad, 1838, (Pterinea *modiolaris*) Ann. Geo. Rep. N. Y., Hud. Riv. Gr. [Sig. like a *Modiola*.]  
*modioliformis*, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Trenton Gr. [Sig. like a *Modiola*.]  
*mytiloides*, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. & Trenton Gr. [Sig. like a shell of the genus *Mytilus*.]  
*nais*, Billings, 1862, Pal. Foss., vol. 1, Black Riv. Gr. [Ety. mythological name.]  
*nasuta*, Conrad, 1841, (Cypricardites *nasutus*) Ann. Rep. N. Y., Trenton & Hud. Riv. Gr. [Sig. nasute.]  
*nuculiformis*, see Tellinomya *nuculiformis*.  
*obtusa*, Hall, 1847, Pal. N. Y., vol. 1, Birdseye Gr. [Sig. obtuse.]  
*orthonota*, Conrad, 1839, (Unio *orthonotus*) Ann. Rep. N. Y., Medina sandstone. [Sig. straight-backed.]

*orthonota*, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Trenton Gr. This name was preoccupied.  
*ovata*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. ovate.]  
*parallela*, Conrad, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. parallel.]  
*parviuscula*, Billings, 1859, Can. Nat. & Geo., vol. 4, Chazy Gr. [Sig. very small.]  
*perlata*, Hall, 1876, 28th Reg. Rep. N. Y., Niagara Gr. [Sig. very wide.]  
*perovata*, see Modiomorpha *perovata*.  
*pholadiformis*, Hall, 1851, Lake Sup. Land Dist., vol. 2, Hud. Riv. Gr. [Sig. like the *Pholas*.]  
*plana*, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Sig. smooth.]  
*primigenia*, Conrad, 1838, (Unio *primigenius*) Ann. Rep. N. Y., Medina sandstone. [Sig. first-born.]  
*recta*, Hall, 1867, 20th Reg. Rep. N. Y., Niagara Gr. [Sig. straight.]  
*rhomboidea*, Hall, 1860, Can. Nat. & Geo., vol. 5, Up. Sil. [Sig. rhomboidal.]  
*rudis*, Billings, 1874, Pal. Foss., vol. 2, Up. Sil. [Sig. rude.]  
*striata*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. striated.]  
*subalata*, Hall, 1852, Pal. N. Y., vol. 2, Clinton & Niagara Gr. [Sig. somewhat winged.]  
*subcarinata*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. somewhat carinated.]  
*subnasuta*, Hall, 1860, Can. Nat. & Geo., vol. 5, Up. Sil. [Sig. somewhat nasute.]  
*subnasuta*, Meek & Worthen, 1870. This name was preoccupied.  
*subspatulata*, Hall, 1847. See Cypricardites *subspatulatus*.  
*superba*, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Sig. grand.]  
*terminalis*, Hall, 1847, Pal. N. Y., vol. 1, Cin'ti Gr. [Sig. terminating.]  
*trentonensis*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Ety. proper name.]  
*truncata*, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. cut short.]  
*undulostriata*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. having waved striae.]  
*varia*, Billings, 1874, Pal. Foss., vol. 2, Low. Held. Gr. [Sig. different.]  
*versaillesensis*, S. A. Miller, 1874, Cin. Quar. Jour. Sci., Cin'ti Gr. [Ety. proper name.]  
*MODIOMORPHA*, Hall, 1870, Prelim. Notice Lam. shells. [Ety. contracted from *Modiola*, a genus of shells; *morphe*, form.]  
*alta*, Conrad, 1841, (Cypricardites *alta*) Ann. Rep. N. Y., Ham. Gr. [Ety. from the elevation of the hinge margin.]  
*alata*, Hall, 1843, (Cypricardites *alata*) Geo. Rep. N. Y., Chemung Gr. [Sig. winged.]

- angustata*, Vanuxem, 1842, (Cypricardites *angustata*) Geo. Rep. N. Y., Catskill Gr. [Sig. narrowed.]
- catskillensis*, Vanuxem, 1842, (Cypricardites *catskillensis*) Geo. Rep. N. Y., Catskill Gr. [Ety. proper name.]
- complanata*, Hall, 1870, Prelim. Notice Lam. shells, Up. Held. Gr. [Sig. smooth.]
- concentrica*, Conrad, 1838, (Cypricardites *concentrica*) Geo. Rep. 4th Dist. N. Y., Ham. Gr. [Sig. marked with concentric lines.]
- cymbula*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. a small boat.]
- hyalea*, Hall, 1870, Prelim. Notice Lam. shells, Waverly Gr. [Ety. proper name.]
- inornata*, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Sig. unadorned.]
- macilenta*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. lean, meager.]
- perovata*, Meek & Worthen, 1865, (Modiolopsis *perovata*) Proc. Acad. Nat. Sci. Phil., Ham. Gr. [Sig. very ovate.]
- planulata*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. flattened.]
- ponderosa*, Hall, 1877, Pal. N. Y., vol. 5, Up. Held. Gr. [Sig. large.]
- quadrula*, Hall, 1870, Prelim. Notice Lam. shells, Chemung Gr. [Sig. a small square.]
- subalata*, Conrad, 1841, (Cypricardites *subalata*) Ann. Rep. N. Y., Ham. Gr. [Sig. somewhat winged.]
- MONOPTERIA, Meek & Worthen, 1866, Proc. Chi. Acad. Nat. Sci., vol. 1. [Ety. *monos*, single; *pteron*, a wing.]
- gibbosa*, Meek & Worthen, 1866, Proc. Chi. Acad. Sci., Coal Meas. [Sig. gibbous, tumid.]
- longispina*, Cox, 1857, (Gervillia *longispina*) Geo. Sur. Ky., vol. 3, Coal Meas. [Sig. long-spined.]
- marian*, White, 1874, Rep. Invert. Foss., Carboniferous. [Ety. proper name.]
- MONOTIS, Bronn, 1824, System Urweltlicher Konchylien. [Ety. *monos*, one; *otos*, ear.]
- elevata*, Conrad, 1848, Proc. Acad. Nat. Sci., vol. 3, Chemung Gr. [Sig. elevated.]
- gregaria*, Meek & Worthen, 1870, Proc. Acad. Nat. Sci., Phil., Coal Meas., [Sig. clustered together, found in flocks.]
- halli*, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- hawni*, see *Eumicrotis hawni*.
- poulsoni*, Conrad, 1848, Proc. Acad. Nat. Sci., vol. 3, Chemung Gr. [Ety. proper name.]
- princeps*, Conrad, 1838, Ann. Rep. N. Y., Ham. Gr. [Sig. primitive, original.]
- radialis*, Phillips, 1834, (Pecten *radialis*) Permian Gr. See *Pseudomonotis radialis*.
- radians*, Conrad, 1842, (Pterinea *radians*) Jour. Acad. Nat. Sci. vol. 8, Ham. Gr. [Sig. radiating.]
- speluncaria*, Schlothheim, 1816, (Gryphites *speluncarius*) Permian Gr. [Sig. like a cave, den, or hole in a rock.]
- variabilis*, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. variable, changing.]
- MYALINA, Koninck, 1844, Desc. Anim. Foss. Carb. Belg. [Ety. *Mya*, a genus of shells; *inus*, like.]
- angulata*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Chester Gr. [Sig. angulated.]
- apachei*, Marcou, 1858, Geol. North America, Carboniferous. [Ety. proper name.]
- aviculoides*, Meek & Hayden, 1860, Proc. Acad. Nat. Sci. Phil., Permian Gr. [Sig. like an *Avicula*.]
- aviculoides*, Winchell, 1862. This name was preoccupied.
- concentrica*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., St. Louis Gr. [Sig. having concentric lines.]
- deltoidea*, Gabb, 1859, Proc. Acad. Nat. Sci. Phil., Low. Carb. [Sig. like the Greek letter *Delta*.]
- imbricaria*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. imbricated.]
- iowensis*, Winchell, 1865, Proc. Acad. Nat. Sci., Chemung Gr. [Ety. proper name.]
- kansanensis*, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]
- keokuk*, Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Ety. proper name.]
- meliniformis*, Meek & Worthen, 1866, Proc. Chi. Acad. Sci., Coal Meas. [Sig. in the form of a purse.]
- michiganensis*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. proper name.]
- mytiliformis*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. like a *Mytilus*.]
- perattenuata*, Meek & Hayden, 1862, Trans. Alb. Inst., vol. 4, Coal Meas. [Sig. very much drawn out, attenuated.]
- permana*, Swallow, 1858, (Mytilus *permanus*) Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]
- perniformis*, Cox, 1857, Geo. Sur. Ky., vol. 3, Coal Meas. [Sig. in the form of a *Perna*.]
- pterineaformis*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. in the form of a *Pterinea*.]
- recta*, Shumard, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. straight.]



- recurvirostris, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. Phil., Up. Coal Meas. [Sig. beaked, recurved.]
- squamosa, Sowerby, 1827, Trans. Geo. Soc. Lond., 2d ser., vol. 3, Permian Gr. [Sig. rough, scaly.]
- subquadrata, Shumard, 1855, Geo. Rep. Mo., Coal Meas. [Sig. somewhat quadrate.]
- st. ludovici, Worthen, 1873, Geo. Sur. Ill., vol. 5, St. Louis Gr. [Ety. proper name; *Sanctus Ludovicus*, St. Louis.]
- swallowi, McChesney, 1860, New Pal. Foss., Coal Meas. [Ety. proper name.]
- MYTILARCA**, Hall, 1870, Prelim. Notice Lam. shells. [Ety. from the two genera *Mytilus* and *Arca*.]
- arenacea, Hall, 1870, Prelim. Notice Lam. shells, Schoharie grit. [Sig. sandy.]
- attenuata, Hall, 1870, Prelim. Notice Lam. shells, Chemung Gr. [Sig. elongated.]
- canadensis, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Ety. proper name.]
- carinata, Hall, 1877, Pal. N. Y., vol. 5, Chemung Gr. [Sig. carinated.]
- chemungensis, Conrad, 1842, (Inoceramus chemungensis) Jour. Acad. Nat. Sci. Phil., vol. 8, Chemung Gr. [Ety. proper name.]
- cordiformis, Hall, 1859, (Megambonia cordiformis) Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. heart-shaped.]
- fibristriata, White & Whitfield, 1862, (Mytilus fibristriatus) Proc. Bost. Soc. Nat. Hist., Kinderhook Gr. [Sig. fibre-lined.]
- mytilimeris, Conrad, 1842, (Inoceramus mytilimeris) Jour. Acad. Nat. Sci., vol. 8, Low. Held. Gr. [Ety. *Mytilus* a genus of shells; *meros*, a part.]
- nitida, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Sig. neat, pretty.]
- occidentalis, White & Whitfield, 1862, (Mytilus occidentalis) Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. western.]
- oviformis, Conrad, 1842, (Inoceramus oviformis) Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. egg-shaped.]
- ponderosa, Hall, 1870, Prelim. Notice Lam. shells, Up. Held. Gr. [Sig. large, heavy.]
- radiata, Hall, 1877, Pal. N. Y., vol. 5, Chemung Gr. [Sig. radiated.]
- sigillum, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. a seal.]
- triquetra, Conrad, 1838, (Pterinea triquetra) Ann. Rep. N. Y., Ham. Gr. [Sig. a triangle.]
- MYTILUS**, Linnæus, 1758, Syst. Nat., 10th ed. [Ety. *Mytilus*, the fish mussel.] This genus does not, so far as known, exist in palæozoic rocks. Most of the species referred to it belong to the genus *Myalina*.
- concavus, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. concave.]
- fibristriatus*, see *Mytilarca fibristriata*.
- occidentalis*, see *Mytilarca occidentalis*.
- ottawensis, Shumard, 1858, Trans. St. Louis Acad. Sci., Up. Coal Meas. [Ety. proper name.]
- permianus*, see *Myalina permiana*.
- squamosus, Sowerby, 1839, Trans. Geol. Soc. Lond., vol. 4, Permian Gr. [Sig. rough, scaly.]
- tenuiradiatus, Shumard, 1858, Trans. St. Louis Acad. Sci., Up. Coal Meas. [Sig. slender-rayed.]
- whitfieldanus, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. proper name.] Prof. Hall suggests that this is a syn. for *Mytilarca fibristriata*.
- Naiadites*, Dawson, 1860, Acad. Geol., but not defined. The name was used for a genus of plants by Buckman in 1843. The fossils were defined by Salter in 1861, under the name of *Anthracomya*.
- angulata*, see *Anthracomya angulata*.
- arenaceus*, see *A. arenacea*.
- carbonarius*, see *A. carbonaria*.
- elongata*, see *A. elongata*.
- lævis*, see *A. lævis*.
- obtusa*, see *A. obtusa*.
- ovalis*, see *A. ovalis*.
- NUCULA**, Lamarck, 1815, Hist. Nat. des An. sans Vert. [Ety. *nucula*, a little nut.]
- anodontoides, Meek, 1871, Reg. Rep. University W. Va., Coal Meas. [Sig. like an *Anodonta*.]
- arata, Hall, 1852, Stansbury's Ex. to Gr. Salt Lake, Coal Meas. [Sig. furrowed.]
- bellatula*, syn. for *N. bellistriata*.
- bellistriata, Conrad, 1841, (Nuculites bellistriatus) Ann. Rep. N. Y., Ham. Gr. [Sig. beautifully striated.]
- beyrichia*, Schlotheim, as identified by Geinitz. See *Nucula parva*.
- corbuliformis, Hall, 1870, Prelim. Notice Lam. shells, Ham. & Chemung Gr. [Sig. resembling a *Corbula*.]
- cylindricus*, syn. for *Cardiomorpha missouriensis*.
- donaciformis*, see *Tellinomya donaciformis*.
- fabula*, see *Cleidophorus fabula*.
- hians, Hall, 1860, 13th Reg. Rep., Ham. Gr. [Sig. gaping.]
- houghtoni, Stevens, 1858, Am. Jour. Sci., vol. 25, Coal Meas. [Ety. proper name.]
- hubbardi*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. Syn. for *Nuculites sulcatus*.
- iowensis, White & Whitfield, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. proper name.]
- kazanensis*, as identified by Geinitz is *Nuculana bellistriata*.
- levata*, see *Tellinomya levata*.
- lineata*, see *Tellinomya lineata*.



- lineolata*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Portage Gr. [Sig. marked with small lines.]
- lirata*, Conrad, 1842, (*Nuculites liratus*) Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. furrowed.]
- machæreiformis*, see *Tellinomya machæreiformis*.
- mactraformis*, see *Tellinomya mactraformis*.
- mercereensis*, syn. for *Cardiomorpha missouriensis*.
- microdonta*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. small-toothed.]
- minuta*, Owen, 1840, Rep. on Min. Lands, Devonian. The name was preoccupied by De France in 1825.
- nasuta*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. nasute.]
- neda*, Hall, 1872, 24th Reg. Rep. N. Y., Up. Held. Gr. [Ety. proper name.]
- notica*, Hall, 1872, 24th Reg. Rep. N. Y., Up. Held. Gr. [Ety. proper name.]
- obliqua*, see *Tellinomya obliqua*.
- oblonga*, see *Cleidophorus oblongus*.
- parva*, McChesney, 1860, New Pal. Foss., Coal Meas. [Sig. small.]
- poststriata*, see *Lyrodesma poststriatum*.
- randalli*, Hall, 1870, Prelim. Notice Lam. shells, Ham. and Chemung Gr. [Ety. proper name.]
- rectangula*, McChesney, 1860, Desc. New Pal. Foss., Ham. Gr. [Sig. rectangular.]
- sectoralis*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. like a sector.]
- shumardana*, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Ety. proper name.]
- stella*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. a star.]
- subnasuta*, Hall, 1872, 24th Reg. Rep. N. Y., Up. Held. Gr. [Sig. somewhat nasute.]
- varicosa*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. varicose.]
- ventricosa*, Hall, 1858, Geo. Sur. Iowa, Coal Meas. [Sig. bulging out.]
- NUCULANA**, Link, 1807, Rost. Samml., vol. 3. [Ety. like a shell of the genus *Nucula*.]
- bellistriata*, Stevens, 1858, (*Leda bellistriata*) Am. Jour. Sci., vol. 25, Coal Meas. [Sig. beautifully striated.]
- bellistriata var. attenuata*, Meek, 1872, Pal. E. Neb., Coal Meas. [Sig. drawn out, attenuated.]
- brevirostris*, Hall, 1870, (*Leda* (?) *brevirostris*) Prelim. Notice Lam. shells, Ham. Gr. [Sig. short-beaked.]
- curta*, Meek, 1861, (*Leda curta*) Proc. Acad. Nat. Sci. Phil., St. Louis Gr. [Sig. short.]
- dens-mammillata*, Stevens, 1858, Am. Jour. Sci., vol. 25, Coal Meas. [Sig. having mammillated teeth.]
- nuculiformis*, Stevens, 1858, Am. Jour. Sci., vol. 25, Coal Meas. [Ety. from the resemblance to *Nucula*.]
- pandoriformis*, Stevens, 1858, Am. Jour. Sci., vol. 25, Coal Meas. [Sig. like a shell of the genus *Pandora*.]
- saccata*, Winchell, 1863, (*Leda saccata*) Proc. Acad. Nat. Sci., Chemung Gr. [Sig. like a little bag.]
- vaseyana*, McChesney, 1860, (*Nuculites vaseyana*) Desc. New Pal. Foss., Ham. Gr. [Ety. proper name.]
- NUCULITES**, Conrad, 1841, Ann. Geo. Rep. N. Y. [Ety. *Nucula*, a genus of shells.]
- altus*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Devonian. [Sig. high.]
- appressus*, see *Cytherodon appressus*.
- bellistriatus*, see *Nucula bellistriata*.
- carinatus*, Hall, 1860, Can. Nat. & Geol., vol. 5, Up. Sil. [Sig. keeled.]
- chemungensis*, see *Schizodus chemungensis*.
- concentricus*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. concentric.]
- constrictus*, see *Palæoneilo constricta*.
- cuneiformis*, Conrad, 1841, Ann. Rep. N. Y., Ham. Gr. [Sig. wedge-shaped.]
- emarginatus*, see *Palæoneilo emarginata*.
- faba*, see *Modiolopsis faba*.
- filosus*, see *Palæoneilo filosa*.
- inflatus*, see *Cypriocardia inflata*.
- lamellosus*, Conrad, 1841, Ann. Geo. Rep. N. Y., Up. Sil. [Sig. having lamellæ.]
- liratus*, see *Nucula lirata*.
- mactroides*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Low. Carb. [Sig. like a shell of the genus *Mactra*.]
- maxima*, see *Palæoneilo maxima*.
- multilineatus*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. many-lined.]
- nyssa*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Ety. proper name.]
- oblongus*, see *Cleidophorus oblongus*.
- oblongatus*, Conrad, 1841, Ann. Geo. Rep. N. Y., Ham. Gr. [Sig. oblong.]
- planulatus*, see *Cleidophorus planulatus*.
- poststriata*, see *Lyrodesma poststriatum*.
- radiatus*, see *Pholadella radiata*.
- rostellatus*, Conrad, 1841, Ann. Rep. N. Y., Ham. Gr. [Sig. little-beaked.]
- scitula*, syn. for *Cleidophorus planulatus*.
- subemarginata*, see *Tellinopsis subemarginata*.
- sulcatinus*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Low. Carb. [Sig. furrowed.]
- triqueter*, Conrad, 1841, Ann. Rep. N. Y., Ham. Gr. [Sig. triangular.]
- vaseyana*, see *Nuculana vaseyana*.
- NYASSA**, Hall, 1870, Prelim. Notice Lam. shells. [Ety. proper name.]
- arguta*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. clearly marked.]
- elliptica*, Hall, 1870, Prelim. Notice Lam. shells, Up. Held. Gr. [Sig. elliptical.]

- recta*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. from the straight umbonal ridge.]
- subalata*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. somewhat winged.]
- Opisthoptera*, Meek. Not defined.
- ORTHODESMA**, Hall & Whitfield, 1875, Ohio Pal., vol. 2. [Ety. *orthos*, straight; *desma*, a ligament.]
- contractum*, Hall, 1847, (Orthonota contracta) Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. contracted.]
- curvatum*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Cin'ti Gr. [Sig. curved.]
- parallellum*, Hall, 1847, (Orthonota parallela) Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. parallel.]
- rectum*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Cin'ti Gr. [Sig. straight.]
- ORTHONOTA** Conrad, 1841, Ann. Rep. N. Y. [Ety. *orthos*, straight; *notos*, the back.]
- angulifera*, (?) McCoy, 1850, Brit. Pal. Rocks, Up. Sil. [Sig. having angles.]
- carinata*, Conrad, 1841, Ann. Rep. N. Y., Ham. Gr. [Sig. keeled.]
- contracta*, see *Orthodesma contractum*.
- curta*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Clinton and Niagara Gr. [Sig. short.]
- ensiformis*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. ensiform.]
- incerta*, Billings, 1874, Pal. Foss., vol. 2, Up. Sil. [Sig. doubtful.]
- parallela*, see *Orthodesma parallellum*.
- parvula*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. very small.]
- phaselia*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. a kidney bean.]
- pholadis*, Conrad, 1838, (Pterinea pholadis) Ann. Geo. Rep. N. Y., Hud. Riv. Gr. [Sig. like a shell of the genus *Pholas*.]
- rectidorsalis*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. straight-backed.]
- siliquoidea*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. like a pod.]
- simulans*, Billings, 1874, Pal. Foss., vol. 2, Up. Sil. [Sig. resembling.]
- (?) *speciosa*, Billings, 1874, Pal. Foss., vol. 2, Up. Sil. [Sig. beautiful.]
- undulata*, Conrad, 1841, Ann. Rep. N. Y., Ham. Gr. [Sig. wavy.]
- venusta*, Billings, 1874, Pal. Foss., vol. 2, Up. Sil. [Sig. elegant.]
- OSTREA**, Linnæus, 1758, Syst. Nat., 10th ed. [Ety. *ostrea*, an oyster.]
- patercula*, Winchell, 1865, Proc. Acad. Nat. Sci., Burlington Gr. [Ety. proper name.]
- Palæarca*, syn. for *Cypricardites*.
- saffordi*, see *Cypricardites saffordi*.
- ventricosa*, see *Cypricardites ventricosus*
- PALEOCARDIA**, Hall, 1867, 20th Reg. Rep. N. Y. [Ety. *palaiois*, ancient; *kardia*, a heart.]
- cordiformis*, Hall, 1867, 20th Reg. Rep. N. Y., Niagara Gr. [Sig. heart-shaped.]
- PALEONEILO**, Hall, 1870, Prelim. Notice Lam. shells. [Ety. *palaiois* ancient; *Neilo*, a genus of shells.]
- attenuata*, Hall, 1870, Prelim. Notice Lam. shells, Waverly Gr. [Sig. attenuated.]
- barrisi*, White & Whitfield, 1862, (Leda barrisi) Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Ety. proper name.]
- bedfordensis*, Meek, 1875, Pal. Ohio, vol. 2, Waverly Gr. [Ety. proper name.]
- bisulcata*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. double-sulcated.]
- brevis*, Hall, 1870, Prelim. Notice Lam. shells, Chemung Gr. [Sig. short.]
- carbonaria*, see *Yoldia carbonaria*.
- constricta*, Conrad, 1842, (Nuculites constricta) Jour. Acad. Nat. Sci., vol. 8, Chemung Gr. [Sig. constricted.]
- emarginata*, Conrad, 1841, (Nuculites emarginata) Ann. Rep. N. Y., Ham. Gr. [Sig. emarginated.]
- filosa*, Conrad, 1842, (Nuculites filosa) Jour. Acad. Nat. Sci., vol. 8, Chemung Gr. [Sig. thready.]
- foecunda*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. abundant.]
- maxima*, Conrad, 1841, (Nuculites maxima) Ann. Rep. N. Y., Ham. Gr. [Sig. the largest.]
- muta*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. inconspicuous.]
- parallela*, Hall, 1870, 23rd Reg. Rep. N. Y., Waverly Gr. [Sig. parallel.]
- perplana*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. very flat.]
- plana*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. flat.]
- tenuistriata*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. fine-lined.]
- PALEANATINA**, Hall, 1870, Prelim. Notice Lam. shells. [Ety. *palaiois*, ancient; *Anatina*, a genus of shells.] The family name at the head of this class should be spelled *Palæanatinidæ* instead of *Palanatinidæ*.
- quadrata*, Hall, 1877, Pal. N. Y., vol. 5, Chemung Gr. [Sig. quadrate.]
- typus*, Hall, 1870, Prelim. Notice Lam. shells, Chemung Gr. [Ety. the type of the genus.]
- Panopæa*, Menard de la Groye, 1807, Ann. du Mus. 9. [Ety. mythological name.]
- cooperi*, see *Chænomya cooperi*.
- PARACYCLAS**, Hall, 1843, Geo. Rep. 4th Dist. N. Y. [Ety. *para*, allied to; *Cyclas*, a genus of shells.]
- elliptica*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Cornif. Gr. [Sig. elliptical.]

- elliptica* var. *occidentalis*, Hall, 1872, 24th Reg. Rep., Up. Held. Gr. [Sig. western.]
- lirata*, Conrad, 1838, (*Posidonia lirata*) Ann. Rep. N. Y., Corniferous Gr. [Sig. furrowed.]
- ohioensis*, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Cornif. Gr. [Ety. proper name.]
- sabini*, White, 1876, Proc. Acad. Nat. Sci., Devonian. [Ety. proper name.]
- Pecten*, Mueller, 1776. This genus is unknown in the Palæozoic rocks.
- acutialatus*, see *Aviculopecten acutialatus*.
- armigerus*, see *A. armigerus*.
- aviculatus*, see *A. aviculatus*.
- broadheadi*, syn. for *Aviculopecten carboniferus*.
- cancellatus*, see *Aviculopecten cancellatus*.
- carboniferus*, see *A. carboniferus*.
- clevelandicus*, see *A. clevelandicus*.
- coloradoensis*, see *A. coloradoensis*.
- convexus*, see *A. convexus*.
- crenulatus*, see *Pernopecten crenulatus*.
- dolabriliformis*, see *Aviculopecten dolabriliformis*.
- duplicatus*, see *A. duplicatus*.
- halli*, see *A. halli*.
- hawni*, syn. for *A. carboniferus*.
- missouriensis*, see *A. missouriensis*.
- neglectus*, see *A. neglectus*.
- occidentalis*, see *A. occidentalis*.
- providencensis*, see *A. providencensis*.
- radialis*, see *Pseudomonotis radialis*.
- ringens*, see *Aviculopecten ringens*.
- striatus*, see *A. striatus*. [ata.]
- tenuilineatus*, see *Streblopteria tenuilineatus*.
- utahensis*, see *Aviculopecten utahensis*.
- PERNOPECTEN**, Winchell, 1865, Proc. Acad. Nat. Sci. Phil. [Ety. from the shells *Perna* and *Pecten*.]
- crenulatus*, Hall, 1843, (*Pecten crenulatus*) Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. crenulated.]
- fasciculatus*, Hall, 1877, Pal. N. Y., vol. 5, Chemung Gr. [Sig. fasciculated.]
- glaber*, Hall, 1843, (*Lima glaber*) Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. smooth.]
- limaformis*, White & Whitfield, 1862, (*Aviculopecten limaformis*) Proc. Bost. Soc. Nat. Hist., vol. 8, St. Louis Gr. [Sig. like a shell of the genus *Lima*.]
- limatus*, Winchell, 1865, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. polished.]
- obsoletus*, Hall, 1843, (*Lima obsoleta*) Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. obsolete.]
- shumardanus*, Winchell, 1865, Proc. Acad. Nat. Sci. Phil., Kinderhook Gr. [Ety. proper name.]
- PHOLADELLA**, Hall, 1870, Prelim. Notice Lam. shells. [Ety. diminutive of the recent genus *Pholas*.]
- cuneata*, Hall, 1870, Prelim. Notice Lam. shells, Kinderhook Gr. [Sig. wedge-shaped.]
- newberryi*, Hall, 1870, Prelim. Notice Lam. shells, Waverly Gr. [Ety. proper name.]
- ornata*, Hall, 1870, Prelim. Notice Lam. shells, Chemung Gr. [Sig. ornamented.]
- radiata*, Conrad, 1842, (*Nuculites radiata*) Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. radiated.]
- truncata*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. truncated.]
- PTHONIA**, Hall, 1870, Prelim. Notice Lam. shells.
- nodicostata*, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. from the nodes on the costæ.]
- sectifrons*, Conrad, 1842, (*Cypriocardites sectifrons*) Jour. Acad. Nat. Sci., Ham. Gr. [Sig. having a divided front.]
- PINNA**, Linnæus, 1758, Syst. Nat., 10th Ed. [Ety. *pinna*, a feather.]
- adamsi*, syn. for *Pinna peracuta*.
- hinrichsana*, White & St. John, 1868, Trans. Chi. Acad. Sci., St. Louis Gr. [Ety. proper name.]
- marshallensis*, Winchell, 1865, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. proper name.]
- missouriensis*, Swallow, 1863, Trans. St. Louis Acad. Sci., Low. Carb. [Ety. proper name.]
- peracuta*, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Sig. very acute.]
- subspatulata*, Worthen, 1875, Geo. Sur. Ill., vol. 6, Warsaw Gr. [Sig. somewhat spatulate or blade-shaped.]
- Pinnopsis**, syn. for *Lunulacardium*.
- acutirostra*, see *Lunulacardium acutirostrum*.
- ornatus*, see *Lunulacardium ornatum*.
- PLACUNOPSIS**, Morris & Lycett, 1853, Monogr. Foss. Great Oolite. [Ety. *Placuna*, a genus of shells; *opsis*, resemblance.]
- carbonaria*, Meek & Worthen, 1866, Proc. Chi. Acad. Sci., vol. 1, Up. Coal Meas. [Sig. pertaining to coal.]
- recticardinalis*, Meek, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. straight on the cardinal line.]
- PLEUROPHORUS**, King, 1844, Ann. Mag. Nat. Hist., vol. 14. [Ety. *pleuron*, a rib; *phoros*, bearing.]
- angulatus*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. angulated.]
- calhouni*, Meek & Hayden, 1858, (*Edmonia calhouni*) Trans. Alb. Inst., vol. 4, Permian Gr. [Ety. proper name.]
- costatiformis*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. like *P. costatus*.]
- oblongus*, Meek, 1872, Pal. E. Neb., Coal Meas. [Sig. oblong.]
- occidentalis*, Meek & Hayden, 1862, Trans. Alb. Inst., vol. 4, Coal Meas. [Sig. western.]

- pallasi*, as identified by Geinitz, is *P. oblongus*.  
*permianus*, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]  
*quadricostatus*, Dawson, 1868, Acad. Geo., Carboniferous. [Sig. four-ribbed.]  
*simplus*, as identified by Geinitz, is *P. subcuneatus*.  
*subcostatus*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Up. Coal Meas. [Sig. somewhat costated.]  
*subcuneatus*, Meek & Hayden, 1858, Trans. Alb. Inst., vol. 4, Permian Gr. [Sig. somewhat wedge-shaped.]  
 (?) *subellipticus*, Meek, 1867, Am. Jour. Sci., vol. 44, Coal Meas. [Sig. somewhat elliptical.]  
*tropidophorus*, Meek, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. keel-bearing.]  
*Pleurorhynchus*, Phillips, syn. for *Conocardium*.  
*attenuatus*, see *Conocardium attenuatum*.  
*crassifrons*, see *Conocardium crassifrons*.  
*cuneus*, see *Conocardium cuneus*.  
*trigonalis*, see *Conocardium trigonale*.  
*vomer*, see *Conocardium vomer*.  
**POSIDONIA**, Bronn, 1824, Syst. Urweltlicher Konchylien. [Ety. proper name.]  
*alata*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Clinton Gr. [Sig. winged.]  
*alveata*, see *Grammysia alveata*.  
*arcuata*, see *Grammysia arcuata*.  
*clathrata*, Lea, 1852, Jour. Acad. Nat. Sci., 2d ser., vol. 2, Coal Meas. [Sig. latticed.]  
*distans*, Lea, 1852, Jour. Acad. Nat. Sci., 2d ser., vol. 2, Coal Meas. [Sig. distant.]  
*lirata*, see *Paracyclas lirata*.  
*moorei*, Gabb, 1859, Proc. Acad. Nat. Sci., Coal Meas. [Ety. proper name.]  
*perstriata*, Lea, 1852, Jour. Acad. Nat. Sci., Coal Meas. [Sig. closely lined.]  
**POSIDONOMYIA**, Bronn, 1837, Leth. Geogn. [Ety. *Posidon*, a proper name; *Mya*, a genus of shells.]  
*ambigua*, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. doubtful.]  
*fracta*, Meek, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. frail, easily broken.]  
*mesambonata*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. *mesos*, middle; *ambon*, umbone.]  
*rhomboidea*, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. rhomboidal.]  
*romingeri*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. proper name.]  
*striata*, Stevens, 1858, Am. Jour. Sci., vol. 25, Coal Meas. [Sig. striated.]  
*whiteana*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. proper name.]  
**PROMACRUS**, Meek, 1871. [Ety. *pro*, forward; *makros*, long.]  
*andrewsi*, Meek, 1871, Am. Jour. Conch., vol. 7, Waverly Gr. [Ety. proper name.]  
*missouriensis*, see *Sanguinolites missouriensis*.  
*nasutus*, see *Sanguinolites nasutus*.  
**PROTHYRIS**, Meek, 1869, Proc. Acad. Nat. Sci. Phil. [Ety. *pro*, forward; *thyris*, an orifice.]  
*elegans*, Meek, 1871, Am. Jour. Conch., vol. 7, Coal Meas. [Sig. elegant.]  
*meeki*, Winchell, 1875, Ohio Pal., vol. 2, Waverly Gr. [Ety. proper name.]  
**PSEUDOMONOTIS**, Beyrich, 1862, Zeit. der Deutsch., Geol. Gesselsch., vol. 14. [Ety. *pseudos*, false; *Monotis*, a genus of shells.]  
*curta*, Hall, 1852, (Avicula curta, a typographical error) Stansbury's Ex. to Gt. Salt Lake, Coal Meas. [Sig. short.]  
*hawni*, Meek & Hayden, 1858, (Monotis hawni) Trans. Alb. Inst., vol. 4, Up. Coal Meas. [Ety. proper name.]  
*hawni* var. *ovata*, Meek & Hayden, 1865, (Eumicrotis hawni var. *ovata*) Pal. Up. Mo., Permian Gr. [Sig. ovate.]  
*hawni* var. *sinuata*, Meek & Worthen, 1866, (Eumicrotis hawni var. *sinuata*) Geo. Sur. Ill., vol. 2, Up. Coal Meas. [Sig. sinuated.]  
*radialis*, (?) Phillips, 1834, (Pecten radialis) Encyc. Meth., vol. 4, Coal Meas. [Sig. radiated.]  
**PTERINEA**, Goldfuss, 1826, Germ. Petref. [Ety. *pteron*, a wing.]  
*appressa*, Conrad, 1838, Ann. Rep. N. Y., Ham. Gr. [Sig. pressed together.]  
*arenacea*, Hall, 1877, Pal. N. Y., vol. 5, Chemung Gr. [Sig. sandy.]  
*bellilineata*, Billings, 1866, Catal. Sil. Foss. Antic. Hud. Riv. Gr. [Sig. beautifully lined.]  
*bisulcata*, see *Grammysia bisulcata*.  
*brisa*, Hall, 1867, 20th Reg. Rep. N. Y., Niagara Gr. [Sig. pressed.]  
*boydi*, Conrad, 1842, (Avicula boydi) Jour. Acad. Nat. Sci. Phil., vol. 8, Ham. Gr. [Ety. proper name.]  
*cardiiformis*, see *Megambonia cardiiformis*.  
*cardinata*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. hinged.]  
*carinata*, Goldfuss, see *Ambonychia carinata*.  
*chemungensis*, Conrad, 1842, (Avicula chemungensis) Jour. Acad. Nat. Sci., vol. 8, Chemung Gr. [Ety. proper name.]  
*concentrica*, Conrad, 1838, Ann. Rep. N. Y., Ham. Gr. [Sig. concentrically lined.]  
*cuneata*, see *Sanguinolites cuneatus*.  
*curiosa*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. curious.]  
*cyrtodontoides*, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Sig. like a shell of the genus *Cyrtodonta*.]  
*flabellum*, Conrad, 1842, (Avicula flabellum) Jour. Acad. Nat. Sci., vol. 8, Up. Held. and Ham. Gr. [Sig. a little fan.]

- longispina, Hall, 1843, (*Avicula longispina*) Geo. Rep. 4th Dist. N. Y., Ham. and Chemung Gr. [Sig. long-spined.]
- modiolaris*, see *Modiolaropsis modiolaris*.
- morganensis*, see *Avicula morganensis*.
- orbicularis*, see *Ambonychia orbicularis*.
- pholadis*, see *Orthonota pholadis*.
- planulata*, see *Cypricardina planulata*.
- prolifera, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. abundant.]
- protecta, Conrad, 1842, (*Avicula protecta*) Jour. Acad. Nat. Sci., vol. 8, Chemung Gr. [Sig. closely-woven.]
- punctulata, Conrad, 1838, Ann. Rep. N. Y., Ham. Gr. [Sig. marked with small dots.]
- pygmaea*, see *Cypricardina pygmaea*.
- quadula, Conrad, 1842, (*Avicula quadula*) Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. a small square.]
- radians*, see *Monotis radians*.
- revoluta, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Sig. curled back.]
- striato-costata, McChesney, 1861, (*Ambonychia striacosta*) New Pal. Foss., Niagara Gr. [Sig. striated and ribbed.]
- suborbicularis*, see *Aviculopecten suborbicularis*.
- subpapyracea, Meek & Worthen, 1866, Proc. Chi. Acad. Sci., Ham. Gr. [Sig. somewhat like *papyrus*.]
- thebesensis, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Niagara Gr. [Ety. proper name.]
- thisbe, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Ety. proper name.]
- triquetra*, see *Mytilarca triquetra*.
- undata*, see *Ambonychia undata*.
- undulata, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Kinderhook Gr. [Sig. wavy.]
- variostrata, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. variably-lined.]
- volans, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Sig. winged.]
- PTERONITELLA**, Billings, 1874, Pal. Foss., vol. 2. [Ety. diminutive of *Pteronites*.]
- curta, Billings, 1874, Pal. Foss., vol. 2, Low. Held. Gr. [Sig. short.]
- oblonga, Billings, 1874, Pal. Foss., vol. 2, Low. Held. Gr. [Sig. oblong.]
- venusta, Billings, 1874, Pal. Foss., vol. 2, Low. Held. Gr. [Sig. beautiful, lovely.]
- PTERONITES**, McCoy, 1844, Syn. Carb. Foss. Ireland. [Ety. *Pteron*, a wing.]
- (?) *chemungensis*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Ety. proper name.]
- decussata, Hall, 1843, (*Avicula decussata*) Geo. Rep. 4th Dist. N. Y., Ham. Gr. [Sig. arranged in pairs that cross each other.]
- gayensis*, Dawson, 1868, Acad. Geo., Low. Carb. [Ety. proper name.]
- laevis*, Hall, 1843, (*Avicula laevis*) Geo. Rep. 4th Dist. N. Y., Ham. Gr. [Sig. smooth.]
- muricatus*, Hall, 1843, (*Avicula muricata*) Geo. Rep. 4th Dist. N. Y., Ham. Gr. [Sig. spiny like a *Murex*.]
- spinigerus*, Conrad, 1842, (*Avicula spinigera*) Jour. Acad. Nat. Sci., vol. 8, Chemung Gr. [Sig. bearing spines.]
- subdecussata, Hall, 1877, Pal. N. Y., vol. 5, Ham. Gr. [Sig. somewhat like *P. decussata*.]
- PTYCHODESMA**, Hall, 1872, 24th Reg. Rep. [Ety. *ptychos*, a folding; *desma*, a ligament or band.]
- knappanum, Hall, 1872, 24th Reg. Rep., Corniferous Gr. [Ety. proper name.]
- PYRENOMÆUS**, Hall, 1852, Pal. N. Y., vol. 2. [Ety. *pyrenos*, Nucula; *omoios*, similar; from its resemblance in general form to the shells of the genus *Nucula*.]
- cuneatus, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. wedge-shaped.]
- SANGUINOLARIA**, Lamarck, 1801, Syst. An. sans Vert. [Ety. *Sanguinolarius*, having blood.]
- leptogaster, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Ety. *leptos*, thin; *gaster*, belly.]
- rostrata, Winchell, 1865, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. beaked.]
- sectoralis, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. like a sector.]
- septentrionalis, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. northern.]
- similis, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. similar.]
- SANGUINOLITES**, McCoy, 1844, Synop. Carb. Foss. Ireland. [Ety. *Sanguinolaria*, a genus of shells; *lithos*, stone.]
- acutus, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. acute.]
- æolus*, Hall, 1870, Prelim. Notice Lam. shells, Waverly Gr. [Ety. mythological name.]
- amygdalinus, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. like an almond.]
- arceiformis, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. like a shell of the genus *Arca*.]
- borealis, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. northern.]
- carinatus, Conrad, 1841, (*Cypricardites carinata*) Ann. Rep. N. Y., Ham. Gr. [Sig. carinated.]
- chemungensis*, Vanuxem, 1842, (*Cypricardites chemungensis*) Geo. Rep. N. Y., Chemung Gr. [Ety. proper name.]
- clavulus, Hall, 1870, Prelim. Notice Lam. shells, Chemung Gr. [Sig. a small nail.]

- cuneatus, Conrad, 1838, (*Pterinea cuneata*) Ann. Rep. N. Y., Ham. Gr. [Sig. wedge-shaped.]
- cylindricus, Winchell, 1863, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. cylindrical.]
- flavius, Hall, 1870, Prelim. Notice Lam. shells, Waverly Gr. [Ety. proper name.]
- glaucus, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Ety. mythological name.]
- hamiltonensis, see *Goniophora hamiltonensis*.
- ida, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Ety. mythological name.]
- iowensis, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Ety. proper name.]
- jejunus, Winchell, 1863, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. scanty, poor.]
- marshallensis, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Ety. proper name.]
- missouriensis, Swallow, 1860, (*Solen* (?) *missouriensis*) Trans. St. Louis Acad. Sci., Low. Carb. [Ety. proper name.]
- nasutus, Meek, 1871, Am. Jour. Conch., vol. 7, Low. Carb. [Sig. having a prominent nose.]
- obliquus, Meek, 1871, Proc. Acad. Nat. Sci., Waverly Gr. [Sig. oblique.]
- perangulatus, Hall, 1870, Prelim. Notice Lam. shells, Schoharie grit. [Sig. very angular.]
- ponderosus, Hall, 1870, Prelim. Notice Lam. shells, Up. Held. Gr. [Sig. bulky, heavy.]
- rigidus, White & Whitfield, 1862, (*Cypriocardia rigidi*) Proc. Bost. Soc. Nat. Hist., Kinderhook Gr. [Sig. rigid.]
- sanduskyensis, Meek, 1871, Proc. Acad. Nat. Sci., Corniferous Gr. [Ety. proper name.]
- solenoides, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. like a shell of the genus *Solen*.]
- strigatus, Winchell, 1865, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. furrowed.]
- subtortuosus, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. somewhat twisted.]
- sulcifer, Winchell, 1866, Rep. Low Peninsula Mich., Ham. Gr. [Sig. bearing furrows.]
- tethys, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Ety. mythological name.]
- truncatus, Conrad, 1842, (*Cypriocardites truncatus*) Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. truncated.]
- undatus, Hall, 1870, Prelim. Notice Lam. shells, Chemung Gr. [Sig. wavy.]
- unioniformis, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. like a shell of the genus *Unio*.]
- valvulus, Hall, 1870, Prelim. Notice Lam. shells, Waverly Gr. [Sig. having small valves, a pod.]
- ventricosus, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., Chemung and Kinderhook Gr. [Sig. ventricose.]
- SCHIZODUS, King, 1844, Ann. Mag. Nat. Hist., vol. 14. [Ety. *schizo*, I split; *odous*, a tooth.]
- amplus, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. full, large.]
- appressus, see *Cytherodon appressus*.
- cayuga, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Ety. proper name.]
- chemungensis, Conrad, 1842, (*Nuculites chemungensis*) Jour. Acad. Nat. Sci., vol. 8, Chemung Gr. [Ety. proper name.]
- chesterensis, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Chester Gr. [Ety. proper name.]
- cuneatus, Meek, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. wedge-shaped.]
- curtus, Meek & Worthen, 1866, Proc. Chi. Acad. Sci., Coal Meas. [Sig. short.]
- ellipticus, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. elliptical.]
- gregarius, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. gregarious.]
- medinaensis, Meek, 1871, Proc. Acad. Nat. Sci. Phil., vol. 23, Waverly Gr. [Ety. proper name.]
- oblatus, Hall, 1870, Prelim. Notice Lam. shells, Chemung Gr. [Sig. oblate.]
- obscurus, see *Schizodus wheeleri*.
- ovatus, Meek & Hayden, 1858, (*Axinus ovatus*) Proc. Acad. Nat. Sci. Phil., Permian Gr. [Sig. ovate.]
- perelegans, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. very elegant.]
- quadrangularis, Hall, 1870, Prelim. Notice Lam. shells, Chemung Gr. [Sig. quadrangular.]
- rhombeus, Hall, 1870, Prelim. Notice Lam. shells, Ham. Gr. [Sig. rhomb-shaped.]
- rossicus, Verneuil, 1845, Geo. Russ., vol. 2, Permian Gr. [Ety. proper name.]
- triangularis, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. triangular.]
- tumidus, see *Cytherodon tumidus*.
- wheeleri, Swallow, 1862, (*Cypriocardia* (?) *wheeleri*) Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]
- SEDGWICKIA, McCoy, 1844, Synop. Carb. Foss. Ireland. [Ety. proper name.]
- altirostrata, Meek & Hayden, 1858, (*Al-lorisma* (?) *altirostrata*) Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. high-beaked.]
- (?) compressa, Meek, 1872, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Sig. compressed.]



- concava*, Meek & Hayden, 1858, (*Lyonsia concava*) Trans. Alb. Inst., vol. 4, Coal Meas. [Sig. concave.]  
*divaricata*, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Cin'ti Gr. [Sig. from the diverging plications.]  
 (?) *fragilis*, Meek, 1872, Proc. Acad. Nat. Sci., Phil., Cin'ti Gr. [Sig. frail, easily broken.]  
 (?) *neglecta*, Meek, 1872, Proc. Acad. Nat. Sci. Phil., Cin'ti Gr. [Sig. neglected, overlooked.]  
*subarcuata*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Keokuk Gr. [Sig. somewhat arched.]  
*topekaensis*, Shumard, 1858, (*Leptodus topekaensis*) Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]  
*Solemya*, Lamarck, 1818, Hist. Nat. An. sans Vert., vol. 5. See *Solenomya*—the correct orthography, first used by Menke, 1828, Syn. Meth. Edit.  
 SOLEN, Linnaeus, 1758, Syst. Nat., 10th ed. [Ety. *Solen*, a tube or pipe.]  
*scalpriformis*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. lancet-shaped.]  
*missouriensis*, see *Sanguinolites missouriensis*.  
*pernianus*, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Ety. proper name.]  
*priscus*, Winchell, 1862, Proc. Acad. Nat. Sci., Portage Gr. [Sig. ancient.]  
*quadrangularis*, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. quadrangular.]  
 SOLENOMYA, Lamarck, 1818, (*Solemya*) Hist. Nat. Anim. sans Vert., vol. 5. [Ety. from the resemblance to the two genera *Solen* and *Mya*.]  
*anodontoides*, Meek, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. like a shell of the genus *Anodonta*.]  
*biarmica*, Verneuil, 1845, Geo. Russ. and Ural Mountains, Permian Gr. This species has not been satisfactorily identified in this country.  
*radiata*, Meek & Worthen, 1860, (*Solemya radiata*) Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. radiated.]  
*recurvata*, Swallow, 1858, Trans. St. Louis Acad. Sci., Up. Coal Meas. [Sig. curved backward.]  
*soleniformis*, Cox, 1857, Geo. Sur. Ky., vol. 3, Coal Meas. [Sig. like a shell of the genus *Solen*.]  
*vetusta*, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Corniferous Gr. [Sig. ancient.]  
 SOLENOPSIS, McCoy, 1844, Carb. Foss. Ireland. [Ety. *Solenopsis*, resembling a shell of the genus *Solen*.]  
*solenoides*, Geinitz, 1866, (*Clidophorus solenoides*) Carb. und Dyas in Neb., Coal Meas. [Sig. like a shell of the genus *Solen*.]  
 STREBLOPTERIA, McCoy, 1851, Ann. Mag. Nat. Hist., 2d series, vol. 7. [Ety. *streblos*, turned the wrong way; *pteron*, a wing.]  
*tenuilineata*, Meek & Worthen, 1860, (*Pecten tenuilineatus*) Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. fine-lined.]  
*Tellina*, Linnaeus, 1758, Syst. Nat., 10th ed. [Ety. *telline*, a sort of mussel.] This genus is unknown in the palæozoic rocks.  
 (?) *ovata*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Ham. Gr. Syn. for *Palæoneilo maxima*.  
 TELLINOMYA, Hall, 1847, Pal. N. Y., vol. 1. [Ety. from a resemblance to the genera *Tellina* and *Mya*.]  
*abrupta*, Billings, 1862, (*Ctenodonta abrupta*) Pal. Foss., vol. 1, Black River Gr. [Sig. abrupt.]  
*æquilatera*, Hall, 1852, Pal. N. Y., vol. 2, Coralline limestone. [Sig. equal-sided.]  
*alta*, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Sig. high.]  
*anatiniformis*, see *Pterotheca anatini-formis*.  
*angela*, Billings, 1865, (*Ctenodonta angela*) Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
*angustata*, Hall, 1860, Can. Nat. & Geo., vol. 5, Low. Sil. [Sig. narrowed.]  
*astartiformis*, Salter, 1859, (*Ctenodonta astartæformis*) Can. Org. Rem., Decade 1, Black Riv. Gr. [Ety. like an *Astarte*.]  
*attenuata*, Hall, 1860, Can. Nat. & Geo., vol. 5, Silurian. [Sig. attenuated.]  
*contracta*, Salter, 1859, (*Ctenodonta contracta*) Can. Org. Rem., Decade 1, Black Riv. & Trenton Gr. [Sig. contracted.]  
*curta*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. short.]  
*donaciformis*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. like a shell of the genus *Donax*.]  
*dubia*, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. & Trenton Gr. [Sig. doubtful.]  
*elliptica*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. elliptical.]  
*gibberula*, Salter, 1859, (*Ctenodonta gibberula*) Can. Org. Rem., Decade 1, Black Riv. & Trenton Gr. [Sig. a little hunch-backed.]  
*gibbosa*, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. & Trenton Gr. [Sig. gibbous.]  
*hartsvillensis*, Safford, 1859, (*Ctenodonta hartsvillensis*) Geo. of Tenn., Nashville Gr. [Ety. proper name.]  
*hilli*, S. A. Miller, 1874, Cin. Quar. Jour. Sci., Cin'ti Gr. [Ety. proper name.]  
*inflata*, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Sig. inflated.]



- iphigenia, Billings, 1862, (Ctenodonta iphigenia) Pal. Foss., vol. 1, Hud. Riv. Gr. [Ety. proper name.]  
 lata, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. wide.]  
 levata, Hall, 1847, (Nucula levata) Pal. N. Y., vol. 1, Black Riv., Trenton and Hud. Riv. Gr. [Sig. smoothed.]  
 lineata, Phillips, 1836, (Nucula lineata) Pal. Foss., Ham. Gr. [Sig. lined.]  
 logani, Salter, 1851, (Ctenodonta logani) Rep. Brit. Assoc., Hud. Riv. Gr. [Ety. proper name.]  
 machæeriformis, Hall, 1843, (Nucula machæariformis) Geo. Rep. 4th Dist. N. Y., Clinton Gr. [Sig. sword-shaped.]  
 mactræformis, Hall, 1843, (Nucula mactræformis) Geo. Rep. 4th Dist. N. Y., Clinton Gr. [Sig. trough-like.]  
 nasuta, Hall, 1847, Pal. N. Y., vol. 1, Black Riv. & Trenton Gr. [Sig. having a prominent nose.]  
 nucleiformis, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. nut-shaped.]  
 nuculiformis, Hall, 1847, (Modiolopsis nuculiformis) Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. like a Nucula.]  
 obliqua, Hall, 1845, (Nucula obliqua) Am. Jour. Sci., vol. 43, Cin'ti Gr. [Sig. oblique.]  
 ovata, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Sig. ovate.]  
 pectunculoides, Hall, 1871, Pamphlet, Cin'ti Gr. [Sig. like a shell of the genus *Pectunculus*.]  
 protensa, Hall, 1852, Stans. Ex. to Gt. Salt Lake, Coal Meas. [Sig. stretched out.]  
 sanguinolarioidea, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. like *Sanguinolaria*.]  
 subnasuta, Hall, 1872, 24th Reg. Rep. N. Y., Up. Held. Gr. [Sig. somewhat nasute.]  
 ventricosa, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Sig. ventricose.]
- TELLINOPSIS, Hall, 1870, Prelim. Notice Lam. shells. [Ety. *tellinopsis*, resembling a shell of the genus *Tellina*.]  
 submarginata, Conrad, 1842, (Nuculites submarginatus) Jour. Acad. Nat. Sci., vol. 8, Ham. Gr. [Sig. slightly emarginated.]  
*Ungulina*, Daudin, 1802, Bosc. Hist. Nat. Coq. 3. [Ety. *ungulina*, like a hoof.]  
*suborbicularis*, see *Cardiomorpha suborbicularis*.  
*Vanuxemia*, syn. for *Cypricardites*.  
*bayfieldi*, see *Cypricardites bayfieldi*.  
*inconstans*, see *Cypricardites inconstans*.  
*montrealensis*, see *Cypricardites montrealensis*.  
*dixonensis*, see *Cypricardites dixonensis*.  
 YOLDIA, Muller, 1842, Kroyer's Nat. Tid. [Ety. proper name.]  
 carbonaria, Meek, 1871, Rep. Reg. University W. Va., Coal Meas. [Sig. pertaining to coal.]  
 gibbosa, McChesney, 1859, (Leda gibbosa) Pal. Foss., Coal Meas. [Sig. gibbous.]  
 knoxensis, McChesney, 1865, (Leda knoxensis) Expl. Pal. Foss., Coal Meas. [Ety. proper name.]  
 levistriata, Meek & Worthen, 1860, (Leda levistriata) Proc. Acad. Nat. Sci. Phil., St. Louis Gr. [Sig. small-lined.]  
 oweni, McChesney, 1860, (Leda oweni) Desc. New Pal. Foss., Coal Meas. [Ety. proper name.]  
 polita, McChesney, 1859, (Leda polita) Pal. Foss., Coal Meas. [Sig. smoothed.]  
 rushensis, McChesney, 1865, (Leda rushensis) Expl. Pal. Foss., Coal Meas. [Ety. proper name.]  
 stevensoni, Meek, 1871, Rep. Reg. University W. Va., Coal Meas. [Ety. proper name.]  
 subscitula, Meek & Hayden, 1858, (Leda subscitula) Trans. Alb. Inst., vol. 4, Permian Gr. [Sig. somewhat pretty.]  
 valvulus, Hall, 1872, 24th Reg. Rep., Corniferous Gr. [Sig. like the shell of a bean.]

# SUB-KINGDOM ARTICULATA.

FIRST CLASS,	-	-	-	-	ANNELIDA.
SECOND CLASS,	-	-	-	-	CRUSTACEA.
THIRD CLASS,	-	-	-	-	ARACHNIDA.
FOURTH CLASS,	-	-	-	-	MYRIAPODA.
FIFTH CLASS,	-	-	-	-	INSECTA.

## CLASS ANNELIDA.

GENERA.—Arenicolites, Conchicolites, Cornulites, Salterella, Serpulites, Spirorbis.

**ARENICOLITES**, Salter, 1856, Quar. Jour. Geo. Soc. [Ety. *arena*, sand; *colo*, I inhabit; *lithos*, stone; circular holes which appear in twos on the surface of sandstones, and having the appearance of worm-burrows like those of the *Arenicola*.]

*spiralis*, as identified by Billings, and others, Pal. Foss., vol. 2, Huronian Gr. [Sig. spiral.]

**CONCHICOLITES**, Nicholson, 1872, Am. Jour. Sci. [Ety. *concha*, a shell; *colo*, I dwell; *lithos*, a stone.]

*corrugatus*, Nicholson, 1872, Lond. Geo. Mag., vol. 9, Cin'ti Gr. [Sig. corrugated.]

*flexuosus*, Hall, 1847, (Tentaculites *flexuosus*) Pal. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Sig. flexuous.]

*intermedius*, Nicholson, 1874, (*Ortonia intermedia*) Geo. Mag., n. s., vol. 1, Ham. Gr. [Sig. intermediate.]

*minor*, Nicholson, 1873, (*Ortonia minor*) Lond. Geo. Mag., vol. 10, Cin'ti Gr. [Sig. less.]

**CORNULITES**, Schlotheim, 1820, Petrefactenkunde. [Ety. *cornu*, horn; *lithos*, stone.]

*arcuatus*, Conrad, 1848, Jour. Acad. Nat. Sci., vol. 8, Niagara Gr. [Sig. bent, bow-shaped.]

*flexuosus*, Hall, 1852, Pal. N. Y., vol. 2, Clinton Gr. [Sig. wavy.]

*flexuosus var. gracilis*, Hall, 1860, Can. Nat. & Geo., vol. 5, Silurian. [Sig. slender.]

*proprius*, Hall, 1876, 28th Reg. Rep. N. Y., Niagara Gr. [Sig. peculiar, lasting.]

*Ortonia*, Nicholson, 1872, Lond. Geo. Mag., vol. 9. This is a synonym for Conchicolites, if indeed both are not synonyms for Cornulites.

*conica*, syn. for Conchicolites *flexuosus*.  
*intermedia*, see Conchicolites *intermedius*.  
*minor*, see Conchicolites *minor*.

**SALTERELLA**, Billings, 1861, Pal. Foss., vol. 1. [Ety. proper name.]

*billingsi*, Safford, 1869, Geo. of Tenn., Trenton Gr. [Ety. proper name.]

*obtusa*, Billings, 1861, Pal. Foss., vol. 1, Potsdam Gr. [Sig. obtuse.]

*pulchella*, Billings, 1861, Pal. Foss., vol. 1, Potsdam Gr. [Sig. very beautiful.]

*rugosa*, Billings, 1861, Pal. Foss., vol. 1, Potsdam Gr. [Sig. wrinkled.]

*Serpula*, Linnæus, 1758, Syst. Nat., 10th ed. [Ety. *serpo*, to creep.]

*omphalodes*, see Spirorbis *omphalodes*.

*valvata*, see Spirorbis *valvatus*.

**SERPULITES**, McLeay, 1839, Murch. Sil. Syst. [Ety. *Serpula*, a genus of annelids.]

*annulatus*, Dawson, 1868, Acad. Geol., Carboniferous. [Sig. ringed.]

*dissolutus*, Billings, 1862, Pal. Foss., vol. 1, Trenton Gr. [Sig. weak, broken.]

*hortonensis*, Dawson, 1868, Acad. Geol., Carboniferous. [Ety. proper name.]

*inelegans*, Dawson, 1868, Acad. Geol., Carboniferous. [Sig. not elegant.]

*murchisoni*, Hall, 1861, Geo. Rep. Wis., Potsdam Gr. [Ety. proper name.]

*splendens*, Billings, 1859, Can. Nat. and Geo., vol. 4, Chazy Gr. [Sig. splendid.]

- SPIRORBIS**, Lamarck, 1801, Syst. An. sans Vert. [Sig. spiral-whorl.]
- ammon**, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Ety. mythological name.]
- angulatus**, Hall, 1862, 15th Reg. Rep. N.Y., Ham. Gr. [Sig. angular.]
- angulatus**, Dawson, 1868. The name was preoccupied.
- annulatus**, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. ringed.]
- annulatus** var. **nodulosus**, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. full of knots.]
- arietinus**, Dawson, 1869, Rep. of Progr., Coal Meas. [Sig. resembling a ram's horn.]
- arkonensis**, Nicholson, 1874, Geo. Mag., vol. 1, Ham. Gr. [Ety. proper name.]
- carbonarius**, Dawson, 1845, Quar. Jour. Geo. Soc., vol. 1, Coal Meas. [Sig. pertaining to coal.]
- flexuosus**, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. bent.]
- inornatus**, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. not ornamented.]
- laxus**, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. loose.]
- obesus**, Winchell, 1866, Rep. Low. Peninsula Mich., Ham. Gr. [Sig. plump in form.]
- orbiculostoma**, Swallow, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. orbicular-mouthed.]
- valvatus**, Goldfuss, 1826, (Serpula valvata). Not American.

# CLASS CRUSTACEA.

FAMILY ACIDASPIDÆ.—Acidaspis, Terataspis.

FAMILY AGLASPIDÆ.—Aglaspis.

FAMILY AGNOSTIDÆ.—Agnostus, Shumardia.

FAMILY ASAPHIDÆ.—Asaphus, Bathyurellus, Bathyrus, Dolichometopus, Illænus, Illænurus, Isotelus, Megalaspis, Nileus, Ogygia.

FAMILY BRONTEIDÆ.—Bronteus.

FAMILY CALYMENIDÆ.—Arges, Calymene, Homalonotus. ~~Goniatites~~

FAMILY CERAURIDÆ.—Amphion, Ceraurus, Encrinurus, Sphaerexochus.

FAMILY CONOCEPHALIDÆ.—Conocephalites, Conocoryphe, Crepicephalus, Dicelloccephalus, Ptychaspis, Solenopleura.

FAMILY CYPHASPIDÆ.—Cyphas.

FAMILY CYTHERIDÆ.—Cythere, Cytherina, Cytheropsis.

FAMILY EURYPTERIDÆ.—Anthraconectes, Dolichopteris, Eurypterus, Pterygotus.

FAMILY HARPEDIDÆ.—Harpes, Harpides.

FAMILY LEPERDITIIDÆ.—Beyrichia, Isochilinia, Leperditia, Primitia.

FAMILY LICHASIDÆ.—Lichas.

FAMILY PARADOXIDÆ.—Agraalos, Anapolenus, Arionellus, Bathynotus, Chariocephalus, Loganellus, ~~Menocephalus~~, Olenellus, Olenus, Paradoxides, Remopleurides, Telephus, Triarthrella, Triarthrus.

FAMILY PHACOPIDÆ.—Dalmanites, Phacops, Thaleops.

FAMILY PROETIDÆ.—Phillipsia, Prætus. ~~Menestheria~~ [cleus.

FAMILY TRINUCLEIDÆ.—Ampyx, Endymionia, Holometopus, Microdiscus, Trinuc-

ORDER AMPHIPODA.—Diplostylus.

ORDER CIRRHPODA.—Plumulites.

ORDER ISOPODA.—Acanthotelson.

ORDER MACRURA.—Anthracopalaemon, Archæocaris, Palæocaris.

ORDER PHYLLOPODA.—Ceratiocaris, Dithyrocaris, Leaia, Solenocaris.

ORDER STOMAPODA.—Amphipeltis.

ORDER XYPHOSURA.—Euproops.

INCERTÆ SEDIS.—Climactichnites, Diplichnites, Helminthoidichnites, Protichnites, Rusichnites.

*Acantholoma*, syn. for *Acidaspis*.

*spinosa*, syn. for *Acidaspis tuberculata*.

ACANTHOTELSON, Meek & Worthen, 1860, Proc. Acad. Nat. Sci. [Ety. *akantha*, a spine; *telson*, the end.]

eveni, Meek & Worthen, 1868, Am. Jour. Sci., vol. 46, Coal Meas. [Ety. proper name.]

*inequalis*, syn. for *Palæocaris typus*.

stimpsoni, Meek & Worthen, 1865, Proc. Acad. Nat. Sci., Coal Meas. [Ety. proper name.]

ACIDASPIS, Murchison, 1839, Sil. Syst. [Ety. *akis*, a spear-point; *aspis*, a shield.]

anchoralis, S. A. Miller, 1875, Cin. Quar. Jour. Sci., Cin. Gr. [Sig. anchor-like.]

*ceralepta*, Anthony, 1838, (Ceratocephala *ceralepta*) Am. Jour. Sci., Cin'ti Gr. Not clearly defined.

cincinnatiensis, Meek, 1873, Ohio Pal., vol. 1, Cin'ti Gr. [Ety. proper name.]

crosotus, Locke, 1843, Am. Jour. Sci., vol. 44, Cin'ti Gr. [Ety. *crossotos*; fringed.]

The word is misspelled—it should be *crossota*.

- danai, Hall, 1862, Geo. Sur. Wis., Niagara Gr. [Ety. proper name.]  
*eripis*, see *Terataspis eripis*.  
*grandis*, see *Terataspis grandis*.  
halli, Shumard, 1855, Geo. Sur. Mo., Trenton Gr. [Ety. proper name.]  
hamata, Conrad, 1841, (*Dicranurus hamatus*) Ann. Rep. N. Y., Low. Held. Gr. [Sig. hooked.]  
horani, Billings, 1859, Rep. of Progr., Trenton Gr. [Ety. proper name.]  
ida, syn. for *Acidaspis danai*.  
onealli, S. A. Miller, 1875, Cin. Quar. Jour. Sci., vol. 2, Cin'ti Gr. [Ety. proper name.]  
parvula, Walcott, 1877, 29th Reg. Rep. N. Y., Trenton Gr. [Sig. very small.]  
*spiniger*, see *Bathyrurus spiniger*.  
trentonensis, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Ety. proper name.]  
tuberculata, Conrad, 1840, Ann. Rep. N. Y., Low. Held. Gr. [Sig. tuberculated.]  
AGLASPIS, Hall, 1863, 16th Reg. Rep. & 1862, Can. Nat. & Geol., vol. 6. [Ety. *Aglaos*, bright; *aspis*, shield.]  
barrandi, Hall, 1863, 16th Reg. Rep. N. Y., Potsdam Gr. [Ety. proper name.]  
AGNOSTUS, Brongniart, 1822, Hist. Nat. Crust. Foss. [Ety. *agnostos*, obscure.]  
acadicus, Hartt, 1868, Acad. Geol., St. John's Gr. [Ety. proper name.]  
americanus, Billings, 1860, Can. Nat. & Geol., vol. 5, Quebec Gr. [Ety. proper name.]  
bidens, Meek, 1872, Hayden's Geo. Rep., Potsdam Gr. [Sig. two-pronged.]  
canadensis, Billings, 1860, Can. Nat. & Geol., vol. 5, Quebec Gr. [Ety. proper name.]  
coloradoensis, Shumard, 1861, Am. Jour. Sci. & Arts, Potsdam Gr. [Ety. proper name.]  
disparilis, Hall, 1863, 16th Reg. Rep. N. Y., Potsdam Gr. [Sig. unequal.]  
fabius, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
galba, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
interstrictus, White, 1874, Rep. Invert. Foss., Potsdam Gr. [Sig. drawn together.]  
josepha, Hall, 1863, 16th Reg. Rep. N. Y., Potsdam Gr. [Ety. proper name.]  
*latus*, see *Beyrichia lata*.  
lobatus, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. lobate.]  
maladensis, Meek, 1872, Hayden's Geo. Rep., Calciferous Gr. [Ety. proper name.]  
nobilis, Ford, 1872, Am. Jour. Sci., 3rd series, vol. 3, Potsdam Gr. [Sig. excellent.]  
orion, Billings, 1860, Can. Nat. & Geol., vol. 5, Quebec Gr. [Ety. mythological name.]  
parilis, Hall, 1863, 16th Reg. Rep. N. Y., Potsdam Gr. [Sig. like, equal.]  
similis, Hartt, 1868, Acad. Geol., St. John's Gr. [Sig. similar, from resemblance to *A. acadicus*.]  
AGRAULOS, Corda, 1847, Bohemian Trilobites. [Ety. proper name.]  
affinis, Billings, 1874, Pal. Foss., vol. 2, Potsdam Gr. [Sig. near to; closely allied to *A. socialis*.]  
oweni, Meek & Hayden, 1861, (*Arionellus oweni*) Proc. Acad. Nat. Sci. Phil., Potsdam Gr. [Ety. proper name.]  
socialis, Billings, 1874, Pal. Foss., vol. 2, Potsdam Gr. [Sig. living in groups.]  
strenuus, Billings, 1874, Pal. Foss., vol. 2, Potsdam Gr. [Sig. vigorous.]  
AMPHION, Pander, 1830, Beitrage zur Geognosie des Russischen Reiches. [Ety. mythological name.]  
barrandi, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
canadensis, Billings, 1859, Can. Nat. and Geol., vol. 4, Chazy Gr. [Ety. proper name.]  
convexus, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. convex.]  
insularis, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. on an island.]  
julius, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
matutinus, Hall, 1863, 16th Reg. Rep. N. Y., Potsdam Gr. [Sig. in the morning.]  
*multisegmentatus*, see *Encrinurus multisegmentatus*.  
salteri, Billings, 1861, Can. Nat. & Geol., vol. 6, Calciferous Gr. [Ety. proper name.]  
westoni, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
AMPHIPELTIS, Salter, 1863, Quar. Jour. Geo. Soc., vol. 19. [Ety. *amphi*, doubtful; *peltis*, provided with a shield or buckler.]  
paradoxus, Salter, 1863, Quar. Jour. Geo. Soc., vol. 19, Devonian. [Sig. extraordinary.]  
AMPYX, Dalman, 1827, Monograph of Trilobites. [Ety. mythological name.]  
halli, Billings, 1861, Pal. Foss., vol. 1, Chazy Gr. [Ety. proper name.]  
laeviusculus, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. quite smooth.]  
normalis, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. according to the square.]  
rutilius, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]  
semicostatus, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. half-ribbed.]  
ANOPOLENUS, Salter, 1864, Geo. Mag., vol. 1. [Ety. *a*, without; *ops*, an eye; *olena*, convexity.]  
venustus, Billings, 1874, Pal. Foss., vol. 2, Low. Potsdam Gr. [Sig. beautiful.]  
ANTHRACONETES, Meek & Worthen, 1868, Am. Jour. Sci., vol. 46. [Ety. *anthrax*, coal; *nectos*, swimming.] A subgenus of *Eurypterus*, founded upon *E. mazonensis*, as the type.

- ANTHRACOPALÆMON**, Salter, 1861, Quar. Jour. Geo. Soc. Lond., vol. 17. [Ety. *anthrac*, coal; *palæmon*, ancient prawn or shrimp.]
- gracilis*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. slender.]
- hillanus*, Dawson, 1877, Geo. Mag., Coal Meas. [Ety. proper name.]
- ARCHÆOCARIS**, Meek, 1872, Proc. Acad. Nat. Sci. Phil. [Ety. *archaios*, ancient; *karis*, a shrimp.]
- vermiformis*, Meek, 1872, Proc. Acad. Nat. Sci. Phil., Low. Carb. [Sig. worm-shaped.]
- ARGES**, Goldfuss, 1839, Nova Acta Phys. Acad. Caes. Leop. Nat. Cur. [Ety. mythological name.]
- phlyctainodes*, Green, 1837, (Calymene phlyctainodes) Am. Jour. Sci., vol. 32, Niagara Gr. [Sig. pimply, pustulous.]
- ARIONELLUS**, Barrande, 1852, Syst. Sil. Boh. [Ety. diminutive of Arion, a generic name.]
- bipunctatus*, Shumard, 1863, Trans. St. Louis Acad. Sci., Potsdam Gr. [Sig. double-dotted.]
- cylindricus*, Billings, 1860, Can. Nat. & Geo., vol. 5, Quebec Gr. [Sig. cylindrical.]
- oweni*, see *Agraulos oweni*.
- planus*, Shumard, 1861, Am. Jour. Sci., Potsdam Gr. [Sig. flat.]
- pustulatus*, Walcott, 1877, 29th Reg. Rep. N. Y., Chazy Gr. [Sig. pustulated.]
- subclavatus*, Billings, 1860, Can. Nat. & Geo., vol. 5, Quebec Gr. [Sig. somewhat club-shaped.]
- texanus*, Shumard, 1861, Am. Jour. Sci., Potsdam Gr. [Ety. proper name.]
- tripunctatus*, Whitfield, 1876, Rep. Recon. Up. Mo. to Yel. Nat. Park, Potsdam Gr. [Sig. three-dotted.]
- Asaphiscus*, Meek. Syn. for *Bathyporellus wheeleri*, see *Bathyporellus wheeleri*.
- ASAPHUS**, Brongniart, 1822, Hist. Nat. Crust. Foss. [Ety. *asaphus*, uncertain, obscure.]
- acantholeurus*, see *Dalmanites acantholeurus*.
- alacer*, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. lively, quick.]
- aspectans*, Conrad, see *Dalmanites aspectans*.
- astragalotes*, Green, 1834, Am. Jour. Sci., vol. 25, (?) Gr. [Sig. having vertebrae.]
- barrandi*, Hall, 1851, Lake Sup. Land. Dist., Birdseye Gr. [Ety. proper name.]
- canadensis*, Chapman, 1856, Can. Jour., vol. 2, Trenton Gr. [Ety. proper name.]
- canalis*, see *Isotelus canalis*.
- corycæus*, see *Proetus corycæus*.
- crypturus*, Green, 1827, Am. Jour. Sci., vol. 13, Up. Sil. [Sig. concealed tail.]
- curiosus*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. curious.]
- denticulatus*, see *Dalmanites denticulatus*.
- diurus*, Green, 1840, Am. Jour. Sci., vol. 37, Niagara Gr. Probably the fragment of a Dalmanite.
- extans*, see *Bathyporellus extans*.
- gigas*, see *Isotelus gigas*.
- goniocercus*, Meek, 1872, Hayden's Geo. Rep., Quebec Gr. [Sig. angular-tailed.]
- goniurus*, Billings, 1868, Can. Nat., vol. 5, Quebec Gr. [Sig. angular-tailed.]
- halli*, Conrad, 1840, syn. for *Dalmanites boothi*.
- halli*, Chapman, 1858, Ann. & Mag. Nat. Hist., 3rd ser., vol. 2, Trenton Gr. [Ety. proper name.]
- hausmani*, Brongniart, as identified by D'Archiac and Verneuil. Not American.
- hincksi*, Salter, 1859, Ann. & Mag. Nat. Hist., 3rd series, vol. 4, Trenton Gr. [Ety. proper name.]
- homalonotoides*, Walcott, 1877, 29th Reg. Rep. N. Y., Trenton Gr. [Sig. like *Homalonotus*.]
- huttoni*, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]
- illænoides*, Billings, 1860, Can. Nat., vol. 5, Quebec Gr. [Sig. like an *Illænus*.]
- iowensis*, Owen, 1852, Geo. Wis., Iowa and Minn., Trenton Gr. [Ety. proper name.]
- laticostus*, syn. for *Dalmanites anchiops*.
- latimarginatus*, Hall, 1847, Pal. N. Y., vol. 1, Trenton and Hud. Riv. Gr. [Sig. broad-margined.]
- limulurus*, see *Dalmanites limulurus*.
- marginalis*, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. [Sig. having a margin.]
- megalophthalmus*, Troost, 1840, 5th Geo. Tenn., Niagara Gr. Not clearly defined, but probably a Dalmanites.
- megistos*, see *Isotelus megistos*.
- micurus*, see *Dalmanites micurus*.
- morrisi*, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]
- myrmecophorus*, see *Dalmanites myrmecophorus*.
- nasutus*, see *Dalmanites nasutus*.
- notans*, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Sig. marked.]
- obtus*, Hall, 1847, Pal. N. Y., vol. 1, Chazy Gr. [Sig. obtuse.]
- pelops*, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. mythological name.]
- platycephalus*, Stokes, 1823, Geo. Trans., vol. 1, Trenton Gr. [Sig. flat-headed.]
- platypleurus*, Green, 1837, Am. Jour. Sci., vol. 32, Low. Sil. [Sig. flat-sided.]
- pleuropteryx*, see *Dalmanites pleuropteryx*.
- polypleurus*, Green, 1838, Am. Jour. Sci., vol. 34, Keokuk Gr. [Ety. many-ribbed.] Probably a *Phillipsia*.
- quadrataudatus*, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. square-tailed.]

- romingeri, Walcott, 1876, Desc. New Pal. Foss., Black Riv. & Trenton Gr. [Ety. proper name.]
- selenurus*, see Dalmanites selenurus.
- stokesi*, see Proetus stokesi.
- tetragonocephalus*, Green, 1834, Am. Jour. Sci., vol. 25. [Sig. square-headed.]
- trentonensis*, see Lichas trentonensis.
- trimblii*, Green, 1837, Jour. Acad. Nat. Sci. Phil., vol. 7, Niagara Gr. [Ety. proper name.]
- vetustus*, Hall, 1847, (*Ogygia vetustus*) Pal. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Sig. ancient.]
- wisconsinensis*, Walcott, 1876, Desc. New Sp. Foss., Trenton Gr. [Ety. proper name.]
- Atops*, Emmons. Syn. for *Triarthrus*.
- trilineatus*, see *Triarthrus trilineatus*.
- Barrandia*, Hall, 1860. The name was pre-occupied by McCoy 1849, and *Olenellus* was afterwards substituted.
- thompsoni*, see *Olenellus thompsoni*.
- vermontana*, see *Olenellus vermontanus*.
- BATHYNOTUS**, Hall, 1860, 18th Reg. Rep. N. Y. [Ety. *bathys*, ample; *notos*, the back; in allusion to the ample central lobe or axis of the typical species.]
- holopyga*, Hall, 1859, (*Olenellus holopyga*) 12th Reg. Rep. N. Y., Potsdam Gr. [Ety. *holos*, entire, all; *pygos*, rump.]
- BATHYURELLUS**, Billings, 1865, Pal. Foss. [Ety. diminutive of *Bathyrurus*, of which it is a subgenus.]
- abruptus*, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. abrupt.]
- bradleyi*, Meek, 1872, Hayden's Geo. Rep., Quebec Gr. [Ety. proper name.]
- expansus*, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. spread out.]
- formosus*, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. beautiful.]
- fraternus*, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. fraternal.]
- litoreus*, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. occurring on the beach.]
- marginatus*, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. bordered.]
- nitidus*, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. neat, pretty.]
- rarus*, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. rare.]
- truncatus*, Meek, 1872, Hayden's Geo. Rep., Potsdam Gr. [Sig. truncated.]
- validus*, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. strong.]
- wheeleri*, Meek, 1872, Hayden's Geo. Rep., Quebec Gr. [Ety. proper name.]
- BATHYRUS**, Billings, 1859, Can. Nat. & Geo., vol. 4. [Ety. *bathys*, deep; *oura*, the tail.]
- amplimarginatus*, Billings, 1859, Can. Nat. & Geo., vol. 4, Calciferous Gr. [Sig. full-bordered.]
- angelini*, Billings, 1859, Can. Nat. & Geo., vol. 4, Chazy Gr. [Ety. proper name.]
- arcuatus*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. bent.]
- armatus*, Billings, 1860, Can. Nat. & Geo., vol. 5, Quebec Gr. [Sig. armed.]
- bituberculatus*, Billings, 1860, Can. Nat. & Geo., vol. 5, Quebec Gr. [Sig. double-tuberculated.]
- breviceps*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. short-headed.]
- capax*, Billings, 1860, Can. Nat. & Geo., vol. 5, Quebec Gr. [Sig. large.]
- caudatus*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. having a tail.]
- conicus*, Billings, 1859, Can. Nat. & Geo., vol. 4, Calciferous Gr. [Sig. conical.]
- cordai*, Billings, 1860, Can. Nat. & Geo., vol. 5, Calciferous Gr. [Ety. proper name.]
- cybele*, Billings, 1859, Can. Nat. & Geo., vol. 4, Calciferous Gr. [Ety. mythological name.]
- dubius*, Billings, 1860, Can. Nat. & Geo., vol. 5, Quebec Gr. [Sig. doubtful.]
- extans*, Hall, 1847, (*Asaphus extans*) Pal. N. Y., vol. 1, Trenton Gr. [Sig. standing up.]
- gregarius*, Billings, 1865, Pal. Foss., vol. 1, Potsdam Gr. [Sig. occurring in flocks.]
- haydeni*, Meek, 1872, Hayden's Geo. Rep., Potsdam Gr. [Ety. proper name.]
- longispinus*, Walcott, 1876, Desc. New Sp. Foss., Black Riv. & Trenton Gr. [Sig. long-spined.]
- minganensis*, Billings, 1865, Pal. Foss., vol. 1, Calciferous Gr. [Ety. proper name.]
- nero*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]
- oblongus*, Billings, 1860, Can. Nat. & Geo., vol. 5, Quebec Gr. [Sig. oblong.]
- parvulus*, Billings, 1861, Pal. Foss., vol. 1, Potsdam Gr. [Sig. very small.]
- perplexus*, Billings, 1865, Pal. Foss., vol. 1, Potsdam Gr. [Sig. intricate, perplexing.]
- perspicator*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. sharp-sighted; from the large eyes.]
- quadratus*, Billings, 1860, Can. Nat. & Geo., vol. 5, Quebec Gr. [Sig. square-shaped.]
- saffordi*, Billings, 1860, Can. Nat. & Geo., vol. 5, Quebec Gr. [Ety. proper name.]
- senectus*, Billings, 1861, Pal. Foss., vol. 1, Potsdam Gr. [Sig. extreme age.]
- serratus*, Meek, 1872, Hayden's Geo. Rep., Potsdam Gr. [Sig. serrated.]
- smithi*, Billings, 1862, Pal. Foss., vol. 1, Black Riv. Gr. [Ety. proper name.]
- solitarius*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. solitary.]
- spiniger*, Hall, 1847, (*Acidaspis spiniger*) Pal. N. Y., vol. 1, Black Riv. & Trenton Gr. [Sig. spiny.]
- strenuus*, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. vigorous.]



- timon, Billings, 1865, Pal. Foss. vol. 1, Quebec Gr. [Ety. proper name.]
- vetulus, Billings, 1865, Pal. Foss., vol. 1, Potsdam Gr. [Sig. old.]
- Belimurus*, Konig, 1825, Icones Fossilium Sectiles. [Ety. *belos*, a dart; *oura*, the tail.]
- danæ*, see *Euproops danæ*.
- BEYRICHTIA, McCoy, 1850, Syn. Sil. Foss. Ireland. [Ety. proper name.]
- æquilatera, Hall, 1860, Can. Nat. & Geo., vol. 5, Silurian. [Sig. equal sided.]
- atlantica, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. mythological name.]
- chambersi, S. A. Miller, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Ety. proper name.]
- ciliata, Emmons, 1855, American Geo., Cin'ti Gr. [Sig. haired on the margin.]
- cincinnatiensis, S. A. Miller, 1875, Cin. Quar. Jour. Sci., vol. 2, Cin'ti Gr. [Ety. proper name.]
- clathrata, Jones, 1858, Ann. & Mag. Nat. Hist., 3rd series, vol. 1, Niagara Gr. [Sig. latticed.]
- decora, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. suitable.]
- duryi, S. A. Miller, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Ety. proper name.]
- foetoidea, White & St. John, 1868, Trans. Chi. Acad. Sci., Up. Coal Meas. [Sig. like a tumor.]
- granulosa, Hall, 1876, 28th Reg. Rep. N. Y., Niagara Gr. [Sig. granular.]
- granulata, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. granulated.]
- jonesi, Dawson, 1868, Acad. Geol., Carboniferous. [Ety. proper name.]
- lata, Vanuxem, 1842, (Agnostus latus) Geo. Rep. N. Y., Clinton Gr. [Sig. wide.]
- lithofactor, White & St. John, 1868, Prel. Notice of New Foss., Coal Meas. [Sig. made of stone.]
- logani, Jones, 1858, Ann. Nat. Hist., 3rd ser., vol. 1, Chazy Gr. [Ety. proper name.]
- logani *var.* leperditoides, Jones, 1858, Can. Org. Rem., Decade 3, Chazy Gr. [Sig. like the genus *Leperditia*.]
- reniformis, Jones, 1858, Can. Org. Rem., Decade 3, Chazy Gr. [Sig. kidney-shaped.]
- maccoyana, Jones, 1855, Ann. & Mag. Nat. Hist., 2d ser., vol. 16, Onondaga Gr. [Ety. proper name.]
- notata, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. marked.]
- notata *var.* ventricosa, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. bulged out.]
- oculifera, Hall, 1871, Pamphlet, Cin'ti Gr. [Sig. bearing eyes.]
- oculina, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. having eyes.]
- pennsylvanica, Jones, 1858, Ann. & Mag. Nat. Hist., 3rd ser., vol. 1, Onondaga Gr. [Ety. proper name.]
- petrifactor, White & St. John, 1868, Trans. Chi. Acad. Sci., St. Louis Gr. [Sig. made of stone.]
- petrifactor *var.* velata, White & St. John, 1868, Trans. Chi. Acad. Sci., St. Louis Gr. [Sig. covered.]
- plagosa, Jones, 1858, Ann. & Mag. Nat. Hist., 3rd ser., vol. 1, Niagara Gr. [Sig. full of stripes.]
- punctulifera, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. bearing punctures.]
- pustulosa, Hall, 1860, Can. Nat. & Geo., vol. 5, Silurian. [Sig. covered with pustules.]
- quadrilirata*, syn. for *Beyrichia regularis*. *regularis*, Emmons, 1855, Am. Geol., Cin'ti Gr. [Sig. formed in bars.]
- richardsoni, S. A. Miller, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Ety. proper name.]
- rugulifera, Jones, 1858, Ann. & Mag. Nat. Hist., 3rd series, vol. 1, Niagara Gr. [Sig. bearing wrinkles.]
- sigillata, Jones, 1858, Ann. & Mag. Nat. Hist., 3rd series, vol. 1, Niagara Gr. [Sig. adorned with figures.]
- spinosa, Hall, 1852, (Cytherina spinosa) Pal. N. Y., vol. 2, Niagara Gr. [Sig. covered with spines.]
- striato-marginata, S. A. Miller, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Sig. having a striated margin.]
- symmetrica, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Sig. symmetrical.]
- trilucata, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. three-furrowed.]
- tumifrons*, syn. for *Beyrichia ciliata*.
- venusta, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. beautiful.]
- Brongniartia*, Eaton, 1832, Geo. Text Book. Syn. for *Asaphus*.
- BRONTEUS, Goldfuss, 1843, in Burmeister, Mon. Tri. [Ety. mythological name.]
- acamas, Hall, 1865, 20th Reg. Rep. N. Y., Niagara Gr. [Ety. mythological name.]
- barrandi, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- insularis, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. upon an island.]
- lunatus, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. crescent-formed.]
- niagarensis, Hall, 1852, Pal. N. Y., vol. 2, Niagara Gr. [Ety. proper name.]
- occeus*, syn. for *Bronteus acamas*.
- Bumastus*, Murchison, 1839, Sil. Syst. See *Illænus*.
- barriensis*, see *Illænus barriensis*.
- trentonensis*, see *Illænus trentonensis*.

- CALYMENE**, Brongniart, 1822, Hist. Nat. Crust. Foss. [Ety. *kekalymenos*, concealed.]  
*anchiops*, see Dalmanites, *anchiops*.  
*becki*, see Triarthrus *becki*.  
*blumenbachi*, Brongniart, 1822, Hist. Nat. Crust. Foss., Niagara Gr. [Ety. proper name.]  
*bucklandi*, syn. for *Ceraurus pleurexanthemus*.  
*bufo*, see Phacops *bufo*.  
*callicephala*, Green, 1832, Monograph Trilobites, Cin'ti Gr. [Sig. beautiful head.]  
*camerata*, Conrad, 1842, Jour. Acad. Nat. Sci., vol. 8, Coralline limestone. [Sig. arched.]  
*christyi*, Hall, 1860, 13th Reg. Rep. N.Y., Cin'ti Gr. [Ety. proper name.]  
*clintoni*, Vanuxem, (Hemicrypturus *clintoni*) Geo. Rep. 3rd Dist. N. Y., Clinton Gr. [Ety. proper name.]  
*crassimarginata*, see Proetus *crassimarginatus*.  
*mammillata*, Hall, 1861, Geo. Rep. Wis., Trenton Gr. [Sig. covered with nipples.]  
*marginalis*, see Proetus *marginalis*.  
*multicosta*, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. having many ribs.]  
*niagarensis*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Niagara Gr. [Ety. proper name.] This is the American variety of *C. blumenbachi*.  
*nupera*, see Phacops *nuperus*.  
*odontcephala*, syn. for Dalmanites *selenurus*.  
*phlyctainodes*, see Arges *phlyctainodes*.  
*platys*, Green, 1832, Monograph of Trilobites, Schoharie grit. [Sig. broad.]  
*rowii*, see Proetus *rowii*.  
*rugosa*, Shumard, 1855, Geo. Rep. Mo., Low. Held. Gr. [Sig. wrinkled.]  
*senaria*, Conrad, 1841, Ann. Rep. N. Y., Trenton & Hud. Riv. Gr. [Sig. is said to be in allusion to six tubercles on the buckler, but the application is not evident.] It is a syn. for *C. callicephala*.  
*spinifera*. Not defined.  
*trisulcata*, Hall, 1843, Geo. Rep. 4th Dist. N. Y., Clinton Gr. [Sig. three-furrowed.]
- CERATIOCARIS**, McCoy, 1849, Ann. & Mag. Nat. Hist., 2d ser., vol. 4. [Ety. *keration*, a pod; *karis*, shrimp.]  
*aculeata*, Hall, 1859, Pal. N. Y., vol. 3, Waterlime Gr. [Sig. armed with sharp points.]  
*acuminata*, Hall, 1859, Pal. N. Y., vol. 3, Waterlime Gr. [Sig. sharp-pointed.]  
*armata*, Hall, 1863, 16th Reg. Rep. N. Y., Ham. Gr. [Sig. armed.]  
*bradleyi*, Meek, 1872, Proc. Acad. Nat. Sci. Phil., Low. Carb. [Ety. proper name.]  
*deweyi*, Hall, 1859, (Onchus *deweyi*) Pal. N. Y., vol. 2, Niagara Gr. [Ety. proper name.]  
*elytroides*, Meek, 1872, Proc. Acad. Nat. Sci. Phil., Low. Carb. [Sig. like the elytra of Beetles.]  
*longicauda*, Hall, 1863, 16th Reg. Rep. N. Y., Genesee slate. [Sig. long-tailed.]  
*maccoyana*, Hall, 1859, Pal. N. Y., vol. 3, Waterlime Gr. [Ety. proper name.]  
*punctata*, Hall, 1863, 16th Reg. Rep. N. Y., Ham. Gr. [Sig. punctured.]  
*sinuata*, Meek & Worthen, 1868, Am. Jour. Sci., vol. 46, Coal Meas. [Sig. marked with depressions.]  
*strigata*, Meek, 1872, Proc. Acad. Nat. Sci. Phil., Low. Carb. [Sig. furrowed, grooved.]
- Ceratocephala*, Warder. Not defined so as to be recognized.  
*ceralepta*, Anthony, a fragment of the tail of a *Ceraurus pleurexanthemus* or of an *Acidaspis*.  
*goniata*, Warder, a fragment of a *Dalmanites* or an *Acidaspis*.
- CERAURUS**, Green, 1832, Monograph Trilobites. [Ety. *keras*, a horn; *oura*, the tail.]  
*apollo*, Billings, 1860, Can. Nat. & Geol., vol. 5, Quebec Gr. [Ety. mythological name.]  
*bimucronatus*, see *Ceraurus niagarensis*.  
*crostus*, see *Acidaspis crostus*.  
*eryx*, Billings, 1860, Can. Nat. & Geo., vol. 5, Quebec Gr. [Ety. mythological name.]  
*glaucus*, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. mythological name.]  
*icarus*, Billings, 1850, Can. Nat. & Geol., vol. 5, Hud. Riv. Gr. [Ety. mythological name.]  
*insignis*, see *Ceraurus niagarensis*.  
*mercurius*, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. mythological name.]  
*niagarensis*, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Ety. proper name.]  
*numitor*, Billings, 1866, Catal. Sil. Foss. Antic., Hud. Riv. Gr. [Ety. mythological name.]  
*nuperus*, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. late, recent.]  
*perforator*, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. a borer through.]  
*pleurexanthemus*, Green, 1832, Monog. Trilobites, Trenton and Hud. Riv. Gr. [Ety. *pleura*, a side; *exanthema*, breaking out.]  
*polydorus*, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. mythological name.]  
*pompilius*, Billings, 1865, Pal. Foss., Chazy & Black Riv. Gr. [Ety. proper name.]  
*prolificus*, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. prolific, common.]  
*pustulosus*, syn. for *Ceraurus pleurexanthemus*.

- rarus, Walcott, 1877, 29th Reg. Rep. N. Y.,  
 Trenton Gr. [Sig. rare.]  
 satyrus, Billings, 1865, Pal. Foss., Chazy  
 Gr. [Ety. mythological name.]  
 sol, Billings, 1865, Pal. Foss., Quebec Gr.  
 [Ety. mythological name.]  
 solitarius, Billings, 1865, Pal. Foss., Que-  
 bec Gr. [Sig. solitary, alone.]  
*vigilans*, see *Encrinurus vigilans*.  
 vulcanus, Billings, 1865, Pal. Foss., Que-  
 bec Gr. [Ety. mythological name.]  
 CHARIOCEPHALUS, Hall, 1863, 16th Reg. Rep.  
 [Ety. *charis*, charming or graceful;  
*kephale*, head.]  
 whitfieldi, Hall, 1863, 16th Reg. Rep.,  
 Potsdam Gr. [Ety. proper name.]  
*Cheirurus*, Beyrich, syn. for *Ceraurus*.  
 CLIMACTICHTNITES, Logan, 1860, Can. Nat. &  
 Geo., vol. 5. [Ety. *klimax*, ladder;  
*ichnos*, a foot step.]  
 wilsoni, Logan, 1860, Can. Nat. & Geo.,  
 vol. 5, Potsdam Gr. [Ety. proper  
 name.]  
*Colpocaris*, Meek, 1872, a subgenus of *Ceratio-*  
*caris*.  
*Conocephalus*, Zenker, 1833, Beitr. Naturg.  
 Preoccupied for a genus of Orthoptera.  
 CONOCEPHALITES, Adams, 1848, Am. Jour.  
 Sci., 2d series, vol. 5. [Ety. *konos*, a  
 cone; *kephale*, head.]  
 adamsi, Billings, 1861, Pal. Foss., vol. 1,  
 Potsdam Gr. [Ety. proper name.]  
 anatinus, Hall, 1863, 16th Reg. Rep. N.  
 Y., Potsdam Gr. [Sig. duck-like.]  
 antiquatus, Salter, 1859, Jour. Geo. Soc.,  
 vol. 15, Potsdam Gr. [Sig. very  
 ancient.]  
 arenosus, Billings, 1861, Pal. Foss., Pots-  
 dam Gr. [Sig. sandy.]  
 aurora, Hartt, 1868, Acad. Geol., St. John's  
 Gr. [Sig. morning.]  
 baileyi, Hartt, 1868, Acad. Geol., St.  
 John's Gr. [Ety. proper name.]  
 billingsi, Shumard, 1861, Am. Jour. Sci.,  
 vol. 32, Potsdam Gr. [Ety. proper  
 name.]  
 binodus, Hall, 1863, 16th Reg. Rep. N.  
 Y., Potsdam Gr. [Sig. two-knotted.]  
 chippewensis, Owen, 1852, (*Lonchocephalus*  
*chippewaensis*) Geo. Iowa, Wis. & Minn.,  
 Potsdam Gr. [Ety. proper name.]  
 depressus, Shumard, 1861, Am. Jour. Sci.,  
 vol. 32, Potsdam Gr. [Sig. depressed.]  
 diadematus, Hall, 1863, 16th Reg. Rep. N.  
 Y., Potsdam Gr. [Sig. adorned with  
 a diadem.]  
 dorsalis, Hall, 1863, 16th Reg. Rep. N. Y.,  
 Potsdam Gr. [Sig. from the back.]  
 elegans, Hartt, 1868, Acad. Geol., St.  
 John's Gr. [Sig. elegant.]  
 eos, Hall, 1863, 16th Reg. Rep. N. Y.,  
 Potsdam Gr. [Sig. the dawn.]  
 eryon, Hall, 1863, 16th Reg. Rep. N. Y.,  
 Potsdam Gr. [Sig. from the genus  
*Eryon*.]  
 formosus, Hartt, 1868, Acad. Geol., St.  
 John's Gr. [Sig. beautiful.]  
 gemini-spinosus, Hartt, 1868, Acad. Geol.,  
 St. John's Gr. [Sig. covered with twin-  
 spines.]  
 halli, Hartt, 1868, Acad. Geol., St. John's  
 Gr. [Ety. proper name.]  
 hamulus, Owen, 1852, (*Lonchocephalus*  
*hamulus*) Geo. Iowa, Wis. & Minn.,  
 Potsdam Gr. [Sig. a little hook.]  
 iowensis, Owen, 1852, (*Dikelocephalus*  
*iowensis*) Geo. Iowa, Wis. & Minn.,  
 Potsdam Gr. [Ety. proper name.]  
 mathewi, Hartt, 1868, Acad. Geol., St.  
 John's Gr. [Ety. proper name.]  
 minor, Shumard, 1863, Trans. St. Louis  
 Acad. Sci., Potsdam Gr. [Sig. less.]  
 minutus, Bradley, 1860, Am. Jour. Sci.,  
 vol. 30, Potsdam Gr. [Sig. small.]  
 miser, Billings, 1861, Pal. Foss., vol. 1,  
 Potsdam Gr. [Sig. wretched, poor.]  
 nasutus, Hall, 1863, 16th Reg. Rep. N.  
 Y., Potsdam Gr. [Sig. having a prom-  
 inent nose.]  
 neglectus, Hartt, 1868, Acad. Geol., St.  
 John's Gr. [Sig. overlooked.]  
 optatus, Hall, 1863, 16th Reg. Rep. N. Y.,  
 Potsdam Gr. [Sig. desired.]  
 orestes, Hartt, 1868, Acad. Geol., St. John's  
 Gr. [Ety. mythological name.]  
 ouangondianus, Hartt, 1868, Acad. Geol.,  
 St. John's Gr. [Ety. proper name.]  
 oweni, Hall, 1863, 16th Reg. Rep. N. Y.,  
 Potsdam Gr. [Ety. proper name.]  
 pattersoni, Hall, 1863, 16th Reg. Rep. N.  
 Y., Potsdam Gr. [Ety. proper name.]  
 perseus, Hall, 1863, 16th Reg. Rep. N. Y.,  
 Potsdam Gr. [Ety. mythological  
 name.]  
 quadratus, Hartt, 1868, Acad. Geol., St.  
 John's Gr. [Sig. squared.]  
 robbi, Hartt, 1868, Acad. Geol., St. John's  
 Gr. [Ety. proper name.]  
 shumardi, Hall, 1863, 16th Reg. Rep. N.  
 Y., Potsdam Gr. [Ety. proper name.]  
 tener, Hartt, 1868, Acad. Geol., St. John's  
 Gr. [Sig. delicate.]  
 teucer, Billings, 1861, Pal. Foss., vol. 1,  
 Potsdam Gr. [Ety. mythological  
 name.]  
 thersites, Hartt, 1868, Acad. Geol., St.  
 John's Gr. [Ety. mythological name.]  
 vulcanus, Billings, 1861, Pal. Foss., vol.  
 1, Potsdam Gr. [Ety. mythological  
 name.]  
 winona, Hall, 1863, 16th Reg. Rep. N. Y.,  
 Potsdam Gr. [Ety. proper name.]  
 wisconsinensis, Owen, 1852, (*Crepicephalus*  
*wisconsinensis*) Geo. Iowa, Wis.  
 & Minn., Potsdam Gr. [Ety. proper  
 name.]  
 zenkeri, Billings, 1860, Can. Nat. & Geol.,  
 vol. 5, Quebec Gr. [Ety. proper name.]  
 CONOCORYPHE, Corda, 1847, Prodr. [Ety.  
*konos*, a cone; *koryphe*, the top of the  
 head.]  
 kingi, Meek, 1870, Proc. Acad. Nat. Sci.,  
 Potsdam Gr. [Ety. proper name.]  
 gallatinensis, Meek, 1872, Hayden's Geo.  
 Rep., Pots. Gr. [Ety. proper name.]

- CREPICEPHALUS**, Owen, 1852, Geo. Sur. Wis., Iowa & Minn. [Ety. *krepis*, a horse-shoe; *kephale*, head.]
- miniscaensis**, Owen, 1852, Geo. Sur. Wis., Iowa & Minn., Potsdam Gr. [Ety. proper name.]
- montanensis**, Whitfield, 1876, Rep. Recon. Up. Mo. to Yel. Nat. Park, Potsdam Gr. [Ety. proper name.]
- wisconsinensis**, see *Conocephalites wisconsinensis*.
- Cryphæus**, Green, 1837, Jour. Acad. Nat. Sci., vol. 7, syn. for *Dalmanites*. This name has priority over *Dalmanites*, but the definition has not given satisfaction.
- boothi**, Green, 1837, Jour. Acad. Nat. Sci., vol. 7. See *Dalmanites boothi*.
- callitelus**, see *Dalmanites calliteles*.
- greeni**, syn. for *Dalmanites boothi*.
- Cryptolithus**, syn. for *Trinucleus*.
- tesselatus**, see *Trinucleus concentricus*.
- Cybele**, Loven, 1845, in Ofversigt af Vetensk. Acad. Handl.
- punctata**, Hall, 1852. This species belongs to the genus *Encrinurus*, and the specific name being preoccupied, the name is changed to *E. ornatus*.
- CYPHASPIS**, Burmeister, 1843, Monograph of Trilobites. [Ety. *cyphos*, convex; *aspis*, a shield.]
- christyi**, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Ety. proper name.]
- girardeauensis**, Shumard, 1855, Geo. Rep. Mo., Up. Sil. [Ety. proper name.]
- CY THERE**, Muller, 1785, Entomostraca sue Insecta, etc. [Ety. proper name.]
- americana**, Shumard, 1858, Trans. St. Louis Acad. Sci., Up. Coal Meas. [Ety. proper name.]
- carbonaria**, Hall, 1858, Trans. Alb. Inst., vol. 4, Warsaw Gr. [Sig. from the Carboniferous Group.]
- cincinnatiensis**, Meek, 1872, Proc. Acad. Nat. Sci., Cin'ti Gr. [Ety. proper name.]
- crassimarginata**, Winchell, 1862, Proc. Acad. Nat. Sci., Marshall Gr. [Sig. thick-margined.]
- nebrascensis**, Geinitz, 1866, Carb. und Dyas in Neb., Coal Meas. [Ety. proper name.]
- okeni**, see *Leperditia okeni*.
- simplex**, White & St. John, 1868, Trans. Chi. Acad. Sci., St. Louis Gr. [Sig. simple.]
- sublævis**, see *Leperditia sublævis*.
- subrecta**, see *Leperditia subrecta*.
- CY THERINA**, Lamarck, 1818, Anim. sans Vert. [Ety. diminutive of *Cythere*.] *alta*, see *Leperditia alta*.
- crenulata**, Emmons, 1856, Am. Geol., Trenton Gr. [Sig. crenulated.]
- cylindrica**, see *Isochilina cylindrica*.
- fabulites**, see *Leperditia fabulites*.
- spinosa**, Hall, 1852, see *Beyrichia spinosa*. Not Reuss in 1844.
- subcylindrica**, Emmons, 1856, Am. Geol., Trenton Gr. [Sig. somewhat cylindrical.] This name was preoccupied by Munster in 1830.
- subelliptica**, Emmons, 1856, Am. Geol., Black Riv. Gr. [Sig. somewhat elliptical.]
- CY THEROPSIS**, McCoy, 1849, Ann. & Mag. Nat. Hist., 2d series, vol. 4. [Ety. *Cytheropsis*, resembling *Cythere*.]
- cinna**, Jones, 1858, Ann. Nat. Hist., 3rd series, vol. 1, Black Riv. Gr. [Sig. neat, pretty.] In 1865 Jones established the genus *Primitia*, in which he included this species.
- rugosa**, Jones, 1858, Ann. Nat. Hist., 3rd series, vol. 1, Black Riv. Gr. [Sig. wrinkled.]
- siliqua**, Jones, 1858, Ann. Nat. Hist., 3d series, vol. 1, Black Riv. Gr. [Sig. a pod.]
- Dalmania**, Emmrich, 1845. This name having been preoccupied, *Dalmanites* has been substituted, though many authors prefer to use *Odontochile*, a name proposed by Corda.
- DALMANITES**, Emmrich, 1845, (*Dalmania*) Barrande, 1852, Sil. Syst. Boh. [Ety. proper name.]
- acantholeurus**, Conrad, 1841, (*Asaphus acantholeurus*) Ann. Rep. N. Y., Onondaga limestone. [Sig. smooth-spined.]
- achates** Billings, 1860, Can. Nat. & Geo., vol. 5, Trenton Gr. [Ety. mythological name.]
- ægeria**, Hall, 1861, 15th Reg. Rep. N. Y., Up. Held. Gr. [Ety. mythological name.]
- anchiops**, Green, 1832, (*Calymene anchiops*) Monograph, Schoharie grit. [Sig. from the closeness of the eyes.]
- anchiops var. armatus**, Hall, 1861, 15th Reg. Rep. N. Y., Schoharie grit. [Sig. armed.]
- aspectans**, Conrad, 1841, (*Asaphus aspectans*) Ann. Rep. N. Y., Up. Held. Gr. [Sig. seeing at a glance.]
- bebryx**, Billings, 1860, Can. Nat. & Geo., vol. 5, Trenton Gr. [Ety. mythological name.]
- bifidus**, Hall, 1862, 15th Reg. Rep. N. Y., Up. Held. Gr. [Sig. divided.]
- boothi**, Green, 1837, (*Cryphæus boothi*) Jour. Acad. Nat. Sci., vol. 7, Ham. Gr. [Ety. proper name.]
- bicornis**, Hall, 1876, 28th Reg. Rep. N. Y., Niagara Gr. [Sig. two-horned.]
- breviceps**, Hall, 1866, Pamphlet, Cin'ti Gr. [Sig. short-headed.]
- callicephalus**, Hall, 1847, (*Phacops callicephalus*) Pal. N. Y., vol. 1, Trenton Gr. [Sig. beautiful head.]
- callitelus**, Green, 1837, (*Cryphæus callitelus*) Am. Jour. Sci. & Arts, Ham. Gr. [Ety. proper name.]

- calypso, Hall, 1861, 15th Reg. Rep. N. Y., Up. Held. Gr. [Ety. mythological name.]
- carleyi, Meek, 1872, Am. Jour. Sci., 3rd ser., vol. 3, Cin'ti Gr. [Ety. proper name.]
- caudatus*, see *Dalmanites limulus*.
- concinus, Hall, 1876, Illust. Devonian Foss., Schoharie grit. [Sig. handsome.]
- coronatus, Hall, 1861, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. crowned.]
- dane, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Niagara Gr. [Ety. proper name.]
- dentatus, Barrett, 1876, Am. Jour. Sci. & Arts, vol. 11, Low. Held. Gr. [Ety. from the dentate margin of the cephalic shield.]
- denticulatus, Conrad, 1841, (*Asaphus denticulatus*) Ann. Rep. N. Y., Up. Held. Gr. [Ety. from the denticulate termination of the ribs.]
- emarginatus, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. emarginated.]
- erina, Hall, 1861, 15th Reg. Rep. N. Y., Up. Held. Gr. [Ety. proper name.]
- helena, Hall, 1861, 15th Reg. Rep. N. Y., Corniferous Gr. [Ety. mythological name.]
- intermedius, Walcott, 1877, 29th Reg. Rep. N. Y., Trenton Gr. [Sig. intermediate.]
- laticaudatus*, Hall, 1847. Prof. Hall says this name may be erased from the list of fossils.
- limulus, Green, 1832, (*Asaphus limulus*) Monograph Trilobites, Niagara Gr. [Ety. having a pointed tail like *Limulus* or king crab.]
- logani, Hall, 1860, Can. Nat. & Geo., vol. 5, Silurian. [Ety. proper name.]
- macrops, Hall, 1862, 15th Reg. Rep. N. Y., Up. Held. Gr. [Ety. *makros*, large; *ops*, the eye.]
- micurus, Green, 1832, (*Asaphus micurus*) Monograph Trilobites, Low. Held. Gr. [Sig. small-tailed.]
- myrmecophorus, Green, 1835, (*Asaphus myrmecophorus*) Supp. to Monograph of Trilobites, Up. Held. Gr. [Sig. wart-bearing.]
- nasutus, Conrad, 1841, (*Asaphus nasutus*) Ann. Rep. N. Y., Low. Held. Gr. [Sig. having a prominent nose.]
- ohioensis, Meek & Worthen, 1871, Proc. Acad. Nat. Sci. Phil., Corniferous Gr. [Ety. proper name.]
- pleione, Hall, 1861, 15th Reg. Rep. N. Y., Up. Held. Gr. [Ety. mythological name.]
- pleuropteryx, Green, 1832, (*Asaphus pleuropteryx*) Monograph Trilobites, Low. Held. Gr. [Sig. side-winged.]
- regalis, Hall, 1876, Illust. Devonian Foss., Schoharie grit. [Sig. regal.]
- selenurus, Eaton, 1832, (*Asaphus selenurus*) Geo. Text Book, Corniferous Gr. [Sig. from the crescent-shaped tail.]
- tridens, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. three-toothed.]
- tridentiferus, Shumard, 1855, Geo. Rep. Mo., Low. Held. Gr. [Sig. bearing three teeth.]
- troosti*, Safford. Not defined.
- verrucosus, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. warty.]
- vigilans, Hall, 1861, Rep. Progr. Wis. Sur., Niagara Gr. [Sig. watchful, eyes opened.]
- DICELLOCEPHALUS, Owen, 1852, Geo. Sur. Wis., Iowa & Min., (written by Owen, *Dikelocephalus*). [Ety. *dikella*, a mattock; *kephale*, head.]
- affinis, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. related to.]
- belli, Billings, 1860, Can. Nat. & Geol., vol. 5, Quebec Gr. [Ety. proper name.]
- (?) *corax*, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]
- cristatus, Billings, 1860, Can. Nat. & Geo. vol. 5, Quebec Gr. [Sig. crested.]
- devinei, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]
- flagricaudus, White, 1874, Rep. Invert. Foss., Quebec Gr. [Sig. whip-tailed.]
- granulosus*, see *Ptychaspis granulosa*.
- hisingeri, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]
- iowensis*, see *Conocephalites iowensis*.
- latifrons, Shumard, 1863, Trans. St. Louis Acad. Sci., vol. 2, Potsdam Gr. [Sig. broad-fronted.]
- limbatus, Hall, 1863, 16th Reg. Rep. N. Y., Potsdam Gr. [Sig. bordered.]
- magnificus, Billings, 1860, Can. Nat. & Geo., vol. 5, Quebec Gr. [Sig. magnificent.]
- megalops, Billings, 1860, Can. Nat. & Geo., vol. 5, Quebec Gr. [Sig. large-eyed.]
- miniscaensis*, see *Ptychaspis miniscaensis*.
- minnesotensis, Owen, 1852, Rep. Wis., Iowa & Minn., Potsdam Gr. [Ety. proper name.]
- minnesotensis, var. *limbatus*, Hall, 1863, 16th Reg. Rep. N. Y., Potsdam Gr. [Sig. bordered.]
- misa, Hall, 1873, 16th Reg. Rep. N. Y., Potsdam Gr. [Ety. proper name.]
- missisquoi, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]
- osceola, Hall, 1863, 16th Reg. Rep. N. Y., Potsdam Gr. [Ety. proper name.]
- oweni, Billings, 1860, Can. Nat. & Geo., vol. 5, Quebec Gr. [Ety. proper name.]
- pauper, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. poor, small.]
- pepinensis, Owen, 1852, Rep. Wis., Iowa & Minn., Potsdam Gr. [Ety. proper name.]
- planifrons, Billings, 1860, Can. Nat. & Geo., vol. 5, Quebec Gr. [Sig. having a plane front.]

- roemeri, Shumard, 1861, Am. Jour. Sci., vol. 32, Potsdam Gr. [Ety. proper name.]
- selectus, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. select.]
- sesostris, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]
- spiniger, Hall, 1863, 16th Reg. Rep. N. Y., Potsdam Gr. [Sig. bearing spines.]
- Dicranurus*, syn. for *Acidaspis hamatus*, see *Acidaspis hamata*.
- DIONIDE, Barrande, 1847, in Lith. Proc. [Ety. from the mythological name *Dione*.]
- (?) perplexa, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. difficult, perplexing.]
- Dipleura*, Green, syn. for *Homalonotus dekayi*, see *Homalonotus dekayi*.
- DIPLICHNITES, Dawson, 1863, Am. Jour. Sci. and Arts, 3rd series, vol. 5. [Ety. *diplos*, double; *ichnos*, foot-print or track.]
- enigma, Dawson, 1863, Am. Jour. Sci. & Arts, 3rd series, vol. 5, Coal Meas. [Sig. obscure, perplexing.]
- DIPLOSTYLUS, Salter, 1863, Quar. Jour. Geo. Soc., vol. 19. [Ety. *Diplostylus*, double-tail; in allusion to the two pairs of appendages to the last segment or telson.]
- dawsoni, Salter, 1863, Quar. Jour. Geo. Soc., vol. 19, Coal Meas. [Ety. proper name.]
- DITHYROCARI, Scouler, 1855, British Pal. Rocks. [Ety. *dithros*, having two valves; *caris*, shrimp.]
- belli, H. Woodward, 1870, Geo. Mag., vol. 8, Mid. Devonian. [Ety. proper name.]
- carbonaria, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. from the Coal Measures.]
- neptuni, Hall, 1863, 16th Reg. Rep. N. Y., Chemung Gr. [Ety. mythological name.]
- DOLICHOMETOPUS, Angelin, 1852, Palæontologia Scandinavica. [Ety. *dolichos*, long; *metope*, panel, or space between two hollows.]
- (?) convexus, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. convex.]
- gibberrulus, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. somewhat humped or convex.]
- rarus, Billings, 1865, Pal. Foss., vol. 1, Calciferous Gr. [Sig. rare.]
- DOLICHOPTERUS, Hall, 1859, Pal. N. Y., vol. 3. [Ety. *dolichos*, long; *pteron*, a wing.]
- macrocheirus, Hall, 1859, Pal. N. Y., vol. 3, Waterlime Gr. [Sig. long-handed.]
- Elliptocephala*, Emmons, 1844, syn. for *Olenus asaphoides*, see *Olenellus asaphoides*.]
- ENCRINURUS, Emmerich, 1844, Zur Naturgeschichte der Trilobiten, im Pruefungs-  
Prog. der Real-Schule, etc. [Ety. (?).  
deltoideus, Shumard, 1855, Geo. Sur. Mo., Up. Sil. [Sig. shaped like the Greek letter *Delta*.]
- elegantulus, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. quite elegant.]
- excedrensis*, Safford. Not defined.
- lævis, Angelin, 1852, Palæontologia Scandinavica, Up. Sil. [Sig. smooth.]
- mirus, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. extraordinary.]
- multisegmentatus, Portlock, 1843, (Amphion multisegmentatus) Rep. Geo. of Londonderry, etc., Anticosti Gr. [Sig. having many segments.]
- nereus, Hall, 1867, 20th Reg. Rep. N. Y., Niagara Gr. [Ety. mythological name.]
- ornatus, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Niagara Gr. [Sig. ornamented.]
- punctatus, Wahlenberg, 1821, Nova Acta Soc. Upsal., Anticosti Gr. [Sig. punctated.]
- raricostatus, Walcott, 1877, 29th Reg. Rep. N. Y., Trenton Gr. [Sig. few-ribbed.]
- trentonensis, Walcott, 1877, 29th Reg. Rep. N. Y., Trenton Gr. [Ety. proper name.]
- vigilans, Hall, 1847, (Ceraurus vigilans) Pal. N. Y., vol. 1, Black Riv. & Trenton Gr. [Sig. vigilant.]
- Endymion*, Billings, 1862. The name being preoccupied for a genus of plants the author proposed *Endymionia*.
- meeki, see *Endymionia meeki*.
- ENDYMONIA, Billings, 1865, Pal. Foss., vol. 1. [Ety. proper name.]
- meeki, Billings, 1862, (Endymion meeki) Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]
- EUPROOPS, Meek, 1867, Am. Jour. Sci., vol. 43. [Ety. *eu*, very; *pro*, forward; *ops*, an eye.]
- danæ, Meek & Worthen, 1865, (Bellinurus danæ) Proc. Acad. Nat. Sci. Phil., Coal Meas. [Ety. proper name.]
- EURYPTERUS, DeKay, 1825, Ann. Lyc. Nat. Hist. N. Y., vol. 1. [Ety. *euros*, breadth; *pteron*, wing or fin.]
- dekayi, Hall, 1859, Pal. N. Y., vol. 3, Waterlime Gr. [Ety. proper name.]
- lacustris, Harlan, 1834, Trans. Geo. Soc. Penn., vol. 1, Waterlime Gr. [Sig. pertaining to a lake or swamp.]
- lacustris var. robustus, Hall, 1859, Pal. N. Y., vol. 3, Waterlime Gr. [Sig. robust.]
- mazonensis, Meek & Worthen, 1868, Am. Jour. Sci., vol. 46, Coal Meas. [Ety. proper name.]
- microphthalmus, Hall, 1855, Pal. N. Y., vol. 3, Waterlime Gr. [Sig. having small eyes.]
- pachycheirus, Hall, 1859, Pal. N. Y., vol. 3, Waterlime Gr. [Sig. thick-handed.]
- pulicaris, Salter, 1863, Quar. Jour. Geo. Soc., vol. 19, Coal Meas. [Ety. *pulis*, a little gate; *karis*, a shrimp.]
- pustulosus, Hall, 1859, Pal. N. Y., vol. 3, Waterlime Gr. [Sig. covered with pustules.]



- remipes, DeKay, 1825, Ann. Lyc. Nat. Hist. N. Y., Waterlime Gr. [Sig. oar-footed.]
- tetragonopthalmus, Fischer, 1839, Bull. Soc. Imper. Nat. Moscou., Waterlime Gr. [Sig. having square eyes.]
- HARPES, Goldfuss, 1839, Nova Acta Physico-medica Academiae Caesareae Leopoldino Carolinae Naturae Curiosorum, vol. 19. [Ety. *harpe*, a hook or sickle.]
- antiquatus, Billings, 1859, Can. Nat. & Geo., vol. 4, Chazy Gr. [Sig. ancient, old.]
- consuetus, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Sig. related to, from its close alliance to *H. ottawensis*.]
- dentoni, Billings, 1863, Can. Nat. & Geo., Hud. Riv. Gr. [Ety. proper name.]
- escanabiae, Hall, 1851, Geo. Lake Sup. Land Dist., vol. 2, Trenton Gr. [Ety. proper name.]
- granti, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]
- ottawensis, Billings, 1865, Pal. Foss., Trenton Gr. [Ety. proper name.]
- HARPIDES, Beyrich, 1846, Untersuchungen Trilobiten als Fort. [Ety. from resemblance to the genus *Harpes*.]
- atlanticus, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. mythological name.]
- concentricus, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. concentric.]
- desertus, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. deserted, solitary.]
- HELMINTHOIDICHNITES, Fitch, 1848, Geo. Sur. Wash. Co. [Sig. like little worm tracks.] See *Gordia marina*.
- marinus, Fitch, 1848, Geo. Sur. Wash. Co., Potsdam Gr. [Sig. marine.]
- tenuis, Fitch, 1848, Geo. Sur. Wash. Co., Potsdam Gr. [Sig. slender.]
- Hemicrypturus*, Green, syn. for *Asaphus*.
- clintoni*, Vanuxem, 1843, Geo. Rep. 3rd Dist. N. Y., Clinton Gr.
- rasoumowski*, syn. for *Asaphus expansus*.
- HOLOMETOPUS, Angelin, 1852, Palaeontologia Scandinavica. [Ety. *holos*, entire; *metopon*, space between the eyes.]
- angelini, Billings, 1862, Pal. Foss., Quebec Gr. [Ety. proper name.]
- HOMALONOTUS, Konig, 1825, Icones. Foss. Scetiles. [Ety. *homalos*, on the same level; *notos*, the back.]
- dawsoni, Hall, 1860, Can. Nat. & Geo., vol. 5, Silurian. [Ety. proper name.]
- dekayi, Green, 1832, (*Dipleura dekayi*) Monograph of Trilobites, Ham. Gr. [Ety. proper name.]
- delphinocephalus, Green, 1832, (*Trimerus delphinocephalus*) Monograph of Trilobites, Clinton & Niagara Gr. [Sig. dolphin-headed.]
- jacksoni, Green, 1837, (*Trimerus jacksoni*) Am. Jour. Sci., vol. 32, Up. Sil. [Ety. proper name.]
- knighti, Koninck, 1825, Icones. Foss. Scetiles, Low. Held. Gr. [Ety. proper name.]
- vanuxemi, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- ILLÆNURUS, Hall, 1863, 16th Reg. Rep. N. Y. [Ety. from the genus *Illænus*; *oura* the tail.]
- quadratus, Hall, 1863, 16th Reg. Rep. N. Y., Potsdam Gr. [Sig. square-shaped.]
- ILLÆNUS, Dalman, 1828, ueber die Palæaden oder die sogenannten Trilobiten. [Ety. *illæno*, to look awry, to squint.]
- americanus, Billings, 1859, Can. Nat. & Geo., vol. 4, Trenton Gr. [Ety. proper name.]
- angusticollis, Billings, 1859, Can. Nat. & Geo., vol. 4, Black Riv. Gr. [Sig. having a narrow neck or column.]
- arcturus, Hall, 1847, Pal. N. Y., vol. 1, Chazy & Black Riv. Gr. [Ety. proper name.]
- arcuatus, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. arched.]
- armatus, Hall, 1867, 20th Reg. Rep., Niagara Gr. [Sig. armed.]
- barriensis*, Murch, 1839, Sil. Syst. The species formerly identified with this one is described by Prof. Hall as *Illænus ioxus*.
- bayfieldi, Billings, 1859, Can. Nat. & Geo., vol. 4, Chazy Gr. [Ety. proper name.]
- clavifrons, Billings, 1859, Can. Nat. & Geo., Chazy & Black Riv. Gr. [Sig. club-fronted.]
- conifrons, Billings, 1859, Can. Nat. & Geo., Black Riv. Gr. [Sig. having a conical front.]
- conradi, Billings, 1859, Can. Nat. & Geo., vol. 4, Black Riv. Gr. [Ety. proper name.]
- consimilis, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. similar in all parts.]
- consobrinus, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. nearly allied.]
- cornigerus, Hall, 1872, 24th Reg. Rep. N. Y., Niagara Gr. [Sig. horned.]
- crassicauda, Wahlenberg, 1821, (*Entomos-tracites crassicauda*) Nov. Act. Soc. Upsal., vol. 8, Trenton & Galena Gr. [Sig. thick-tailed.]
- cuniculus, Hall, 1867, 20th Reg. Rep. N. Y., Niagara Gr. [Sig. a cradle.]
- daytonensis, Hall & Whitfield, 1875, Ohio Pal., vol. 2, Clinton Gr. [Ety. proper name.]
- fraternus, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. fraternal.]
- globosus, Billings, 1859, Can. Nat. & Geo., vol. 4, Chazy Gr. [Sig. globose.]
- grafftonensis, Meek & Worthen, 1869, Proc. Acad. Nat. Sci. Phil., Niagara Gr. [Ety. proper name.]
- grandis, Billings, 1859, Can. Nat. & Geo., vol. 4, Hud. Riv. Gr. & Mid. Sil. [Sig. grand.]
- imperator, Hall, 1861, Rep. of Progr. Wis., Niagara Gr. [Sig. commander-in-chief.]
- incertus, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. uncertain.]



- indeterminatus, Walcott, 1877, 29th Reg. Rep. N. Y., Black Riv. Gr. [Sig. not determined.]
- insignis, Hall, 1867, 20th Reg. Rep. N. Y., Niagara Gr. [Sig. distinguished by a mark.]
- ioxus, Hall, 1847, 20th Reg. Rep. N. Y., Niagara Gr. [Ety. mythological name.]
- latidorsatus, Hall, 1847, Pal. N. Y., vol. 1, Trenton Gr. [Sig. broad-backed.]
- milleri, Billings, 1859, Can. Nat. & Geo., vol. 4, Black River and Trenton Gr. [Ety. proper name.]
- orbicaudatus, Billings, 1859, Can. Nat. & Geo., vol. 4, Hud. Riv. Gr. & Mid. Sil. [Sig. having a circular tail.]
- ovatus, Conrad, 1843, Proc. Acad. Nat. Sci. Phil., vol. 1, Black Riv. Gr. [Sig. egg-shaped.]
- simulator, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. imitator.]
- taurus, Hall, 1861, Rep. of Progr. Wis. Sur., Trenton & Galena Gr. [Ety. mythological name.]
- trentonensis, Emmons, 1842, (Bumastus trentonensis) Geo. Rep. N. Y., Trenton Gr. [Ety. proper name.]
- tumidifrons, Billings, 1865, Pal. Foss., Quebec Gr. [Sig. swollen out in front.]
- vindex, Billings, 1865, Pal. Foss., Chazy Gr. [Sig. a defender, a revenger.]
- worthenanus, syn. for Illænus insignis.
- ISOCHILINA, Jones, 1858, Can. Org. Rem., Decade 3. [Ety. *isos*, equal; *cheilos*, lip.]
- cylindrica, Hall, 1852, (Cytherina cylindrica) Pal. N. Y., vol. 2, Medina Gr. [Sig. cylindrical.]
- gracilis, Jones, 1858, Can. Org. Rem., Decade 3, Black Riv. Gr. [Sig. slender.]
- ottawa, Jones, 1858, Can. Org. Rem., Decade 3, Black Riv. Gr. [Ety. proper name.]
- ISOTELUS, DeKay, 1825, Annals Lyceum Nat. Hist. N. Y., vol. 1. [Ety. *isos*, equal; *telos*, end.] A subgenus of Asaphus.
- canalis, Conrad, 1847, Pal. N. Y., Trenton & Hud. Riv. Gr. [Sig. a groove or channel.]
- gigas, DeKay, 1825, Ann. Lyc. Nat. Hist. N. Y., vol. 1, Trenton & Hud. Riv. Gr. [Sig. a giant.]
- maximus, see Isotelus megistos.
- megistos, Locke, 1841, Proc. Am. Assoc., Trenton & Hud. Riv. Gr. [Sig. very large.]
- vigilans, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Phil., Cin'ti. Gr. [Sig. watching.]
- LEAIA, Jones, 1862, App. to Mon. Foss., Estheriæ. [Ety. proper name.]
- leidyi, Lea, 1856, (Cypricardia leidyi) Proc. Acad. Nat. Sci., vol. 7, Coal Meas. [Ety. proper name.]
- tricarinata, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, Coal Meas. [Sig. three-keeled.]
- LEPERDITIA, Roualt, 1851, Bull. Soc. Geo. France, 2nd series, t. 8. [Ety. *lepis*, a scale; *ditos*, double.]
- alta, Conrad, 1843, (Cytherina alta) Geo. Rep. 3rd Dist. N. Y., Low. Held. Gr. [Sig. high.]
- amygdalina, Jones, 1858, Can. Org. Rem., Decade 3, Black Riv. Gr. [Sig. like an almond.]
- anna, Jones, 1858, Can. Org. Rem., Decade 3, Calciferous Gr. [Ety. proper name.]
- antioctiana, Jones, 1858, Can. Org. Rem., Decade 3, Hud. Riv. Gr. [Ety. proper name.]
- arctica, Jones, 1856, Ann. & Mag. Nat. Hist., 2nd series, vol. 17, Up. Sil. [Sig. northern, arctic.]
- bivia, White, 1874, Rep. Invert. Foss., Quebec Gr. [Sig. having two ways or passages.]
- byrnesi, S. A. Miller, 1874, Cin. Quar. Jour. Sci., vol. 1, Cin'ti Gr. [Ety. proper name.]
- canadensis, Jones, 1858, Ann. Nat. Hist., 3rd series, vol. 1, Chazy to Trenton Gr. [Ety. proper name.]
- capax, Safford. Not defined.
- cayuga, Hall, 1862, 15th Reg. Rep. N. Y., Cornif. Gr. [Ety. proper name.]
- concinna, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. small and beautiful.]
- cylindrica, Hall, 1871, Pamphlet, Cin'ti Gr. [Sig. cylindrical.]
- fabia, Hall, 1876, 28th Reg. Rep. N. Y., Niagara Gr. [Sig. a bean.]
- fabulites, Conrad, 1843, (Cytherina fabulites) Proc. Acad. Nat. Sci. Phil., Trenton Gr. [Sig. a small bean.]
- fonticola, Hall, 1867, 20th Reg. Rep. N. Y., Niagara Gr. [Sig. fountain-dwelling.]
- gibbera, Jones, 1856, Ann. & Mag. Nat. Hist., 2nd series, vol. 17, Niagara Gr. [Sig. humpbacked.]
- gracilis, see Isochilina gracilis.
- hudsonica, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- jonesi, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- josephana, Jones, 1858, Can. Org. Rem., Decade 3, Black Riv. to Trenton Gr. [Ety. proper name.]
- labrosa, Jones, 1858, Can. Org. Rem., Decade 3, Chazy Gr. [Sig. having a rim or border.]
- louckana, Jones, 1858, Can. Org. Rem., Decade 3, Black Riv. Gr. [Ety. proper name.]
- marginata, Keyserling, 1846, Wissenschaftliche Beobachtungen, etc., Niagara Gr. [Sig. bordered.]
- minutissima, Hall, 1871, Pamphlet, Cin'ti Gr. [Sig. very small.]
- morgani, Safford. Not defined.
- nana, Jones, 1858, Can. Org. Rem., Decade 3, Calciferous Gr. [Sig. dwarfish.]

- okeni, Munster, 1830, (Cythere okeni) Jahrbuch für Min., Geo. und Petrif., Carboniferous. [Ety. proper name.]
- ottawa, see *Isochilina ottawa*.
- ovata, Jones, 1858, Ann. & Mag. Nat. Hist., 3rd ser., vol. 1, Black Riv. Gr. [Sig. egg-shaped.]
- paquettana, Jones, 1858, Can. Org. Rem., Decade 3, Black Riv. Gr. [Ety. proper name.]
- parasitica, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. parasitic.]
- parvula, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. very small.]
- pennsylvanica, Jones, 1858, Ann. & Mag. Nat. Hist., 3rd ser., vol. 1, Clinton Gr. [Ety. proper name.]
- punctulifera, Hall, 1860, 13th Reg. Rep. N. Y., Ham. Gr. [Sig. bearing dots.]
- scalaris, Jones, 1858, Ann. & Mag. Nat. Hist., 3rd ser., vol. 1, Waterlime Gr. [Sig. like a ladder.]
- seneca, Hall, 1862, 15th Reg. Rep. N. Y., Ham. Gr. [Ety. proper name.]
- sinuata, Hall, 1860, Can. Nat. & Geo., vol. 5, Silurian. [Sig. marked with depressions.]
- troyensis, Ford, 1863, Am. Jour. Sci. & Arts, 3rd ser., vol. 6, Low. Potsdam Gr. [Ety. proper name.]
- turgida, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. swollen out.]
- ventralis, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. ventral.]
- spinulifera, Hall, 1862, 15th Reg. Rep. N. Y., Cornif. Gr. [Sig. bearing spines.]
- sublævis, Shumard, 1855, (Cythere sublævis) Geo. Rep. Mo., Low. Magnesian Gr. [Sig. somewhat smooth.]
- LICHAS**, Dalman, 1826, Monograph of Trilobites. [Ety. mythological name.]
- armatus, Hall, 1862. Being preoccupied, the name is changed to *L. eriopia*.
- bigsbyi, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]
- boltoni, Bigsby, 1825, (Paradoxides boltoni) Jour. Acad. Nat. Sci., vol. 4, Niagara Gr. [Ety. proper name.]
- boltoni var. occidentalis, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. western.]
- breviceps, Hall, 1863, Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. short-headed.]
- canadensis, Billings, 1866, Catal. Sil. Foss. Antic., Antic. Gr. [Ety. proper name.]
- cucullus, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Trenton Gr. [Sig. a cap.]
- decipiens, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Sig. doubtful.]
- eriopia, see *Terataspis eriopia*.
- grandis, see *Terataspis grandis*.
- jukesi, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]
- minganensis, Billings, 1865, Pal. Foss., vol. 1, Chazy and Black Riv. Gr. [Ety. proper name.]
- nereus, Hall, 1863, 16th Reg. Rep. N. Y., Niagara Gr. [Ety. mythological name.]
- pugnax, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Sig. war-like.]
- pustulosus, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. covered with pustules.]
- superbus, Billings, 1875, Can. Nat. & Geol., Corniferous Gr. [Sig. superb.]
- trentonensis, Conrad, 1842, (Asaphus trentonensis) Jour. Acad. Nat. Sci., vol. 8, Black Riv., Trenton and Hud. Riv. Gr. [Ety. proper name.]
- Loganellus*, Devine, 1863, Can. Nat. & Geo., vol. 8. [Ety. proper name.]
- quebecensis*, see Olenus (?) logani.
- Lonchocephalus*, syn. for *Conocephalites*.
- chippevensis*, see *Conocephalites chippevensis*.
- hamulus*, see *Conocephalites hamulus*.
- MEGALASPIS**, Angelin, 1852, Palæontologia Scandinavica. [Ety. *megale*, great; *aspis*, shield.]
- belemnurus, White, 1874, Rep. Invert. Foss., Quebec Gr. [Ety. *belemn*, a dart; *oura*, a tail.]
- MENOCEPHALUS**, Owen, 1852, Geo. Sur. Wis., Iowa & Minn. [Ety. *menos*, strength; *kephale*, head.]
- globosus, Billings, 1860, Can. Nat. & Geo., vol. 5, Quebec Gr. [Sig. globose.]
- minnesotensis, Owen, 1852, Rep. Iowa, Wis. and Minn., Potsdam Gr. [Ety. proper name.]
- salteri, Devine, 1863, Can. Nat. & Geo., vol. 8, Quebec Gr. [Ety. proper name.]
- sedgwicki, Billings, 1860, Can. Nat. & Geo., vol. 5, Quebec Gr. [Ety. proper name.]
- MICRODISCUS**, Emmons, 1856, Am. Geol. [Ety. *mikros*, small; *diskos*, a quoit.]
- dawsoni, Hartt, 1868, Acad. Geol., St. John's Gr. [Ety. proper name.]
- lobatus, Hall, 1847, (Agnostus lobatus) Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. divided into segments.]
- meeki, Ford, 1876, Am. Jour. Sci. & Arts, Low. Potsdam Gr. [Ety. proper name.]
- quadricostatus, Emmons, 1856, Am. Geo., Quebec Gr. [Sig. four-ribbed.]
- speciosus, Ford, 1863, Am. Jour. Sci. & Arts, 3rd series, vol. 6, Low. Potsdam Gr. [Sig. beautiful.]
- NILEUS**, Dalman, 1826, Monograph of Trilobites. [Ety. mythological name.]
- affinis, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. near to, related.]
- macrops, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. having large eyes.]
- scrutator, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. a searcher.]
- Nuttainia*, syn. for *Trinucleus*.
- concentrica*, see *Trinucleus concentricus*.
- spara*, syn. for *Homalonotus dekeyi*.

- Odontocephalus*, Conrad, 1840, Ann. Geo. Rep. N. Y.  
*selenurus*, see *Dalmanites selenurus*.  
*Odontochile*, syn. for *Dalmanites*.  
*Ogygia*, Brongniart, 1822, Hist. Nat. Crust. Foss. [Ety. mythological name.]  
*vetusta*, see *Asaphus vetustus*.  
**OLENELLUS**, Hall, 1861, 14th Reg. Rep. N. Y. [Ety. diminutive of *Olenus*.]  
*asaphoides*, Emmons, 1844, (Elliptocephalus asaphoides) Geo. Rep. N. Y., Potsdam Gr. [Sig. like an *Asaphus*.]  
*gilberti*, Meek, 1874, Rep. Invert. Foss., Potsdam Gr. [Ety. proper name.]  
*howelli*, Meek, 1874, Rep. Invert. Foss., Potsdam Gr. [Ety. proper name.]  
*thompsoni*, Hall, 1859, (*Olenus thompsoni*) 12th Reg. Rep. N. Y., (*Barrandia thompsoni*) 13th Reg. Rep., (*Paradoxides thompsoni*) Emmons, Man. Geo., Potsdam Gr. [Ety. proper name.]  
*vermontanus*, Hall, 1859, (*Olenus vermontanus*) 13th Reg. Rep. N. Y., Potsdam Gr. [Ety. proper name.]  
**OLENUS**, Dalman, 1826, Monograph of Trilobites. [Ety. mythological name.]  
*asaphoides*, see *Olenellus asaphoides*.  
 (?) *logani*, Devine, 1863, Can. Nat. & Geo., vol. 8, Quebec Gr. [Ety. proper name.]  
*thompsoni*, see *Olenellus thompsoni*.  
*undulostriatus*, Hall, 1847, Pal. N. Y., vol. 1, Hud. Riv. Gr. [Sig. having waved striae.]  
*vermontana*, see *Olenellus vermontanus*.  
**PALÆOCARIS**, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil. [Ety. *palaaios*, ancient; *karis*, a shrimp.]  
*typus*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Ety. type of the genus.]  
**PARADOXIDES**, Brongniart, 1822, Hist. Nat. Crust. Foss. [Ety. *paradoxos*, marvelous, paradoxical.]  
*arcuatus*, Harlan, 1835, Trans. Geo. Soc. Penn., Potsdam Gr. [Sig. arched.]  
*becki*, see *Triarthrus becki*.  
*bennetti*, Salter, 1859, Quar. Jour. Geo. Soc., vol. 15, Potsdam Gr. [Ety. proper name.]  
*boltoni*, see *Lichas boltoni*.  
*decorus*, Billings, 1865, Pal. Foss., vol. 1, Potsdam Gr. [Sig. beautiful.]  
*eatoni*, syn. for *Triarthrus becki*.  
*harlani*, Green, 1834, Am. Jour. Sci., vol. 25, Potsdam Gr. [Ety. proper name.]  
*lamellatus*, Hartt, 1868, Acad. Geol., St. John's Gr. [Sig. from the laminae on the anterior lobe of the glabella.]  
*micmac*, Hartt, 1868, Acad. Geol., St. John's Gr. [Ety. proper name.]  
*nevadensis*, Meek, 1870, Proc. Acad. Nat. Sci., Potsdam Gr. [Ety. proper name.]  
*tenellus*, Billings, 1874, Pal. Foss., vol. 2, Potsdam Gr. [Sig. very delicate.]  
*thompsoni*, see *Olenellus thompsoni*.  
*triarthrus*, Harlan, 1835, Trans. Geo. Soc. Penn., Potsd. Gr. [Sig. three-jointed.]  
*vermontana*, see *Olenellus vermontanus*.  
*Peltura*, M. Edwards, 1840, Crustaces, etc. *holopyga*, Hall, 1859, see *Bathynotus holopyga*.  
**PEMPHIGASPIIS**, Hall, 1863, 16th Reg. Rep. N. Y. [Ety. *pemphix*, a pustule; *aspis*, a shield.]  
*bullata*, Hall, 1863, 16th Reg. Rep. N. Y., Potsdam Gr. [Sig. studded, bossed.]  
**PHACOPS**, Emmrich, 1839, de Trilobites. [Ety. *phakos*, a lens; *ops*, the eye.]  
*bufo*, Green, 1832, (*Calymene bufo*) Monograph of Trilobites, Ham. Gr. [Sig. a toad.]  
*bombifrons*, Hall, 1861, 15th Reg. Rep. N. Y., Up. Held. Gr. [Sig. a hollow-sounding front.]  
*cacaponia*, Hall, 1861, 15th Reg. Rep. N. Y., Up. Held. Gr. [Ety. proper name.]  
*callicephala*, see *Dalmanites callicephala*.  
*cristata*, Hall, 1861, 15th Reg. Rep. N. Y., Up. Held. Gr. [Sig. tufted.]  
*hudsonica*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]  
*laticaudus*, see *Dalmanites laticaudus*.  
*logani*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Ety. proper name.]  
*nupera*, Hall, 1843, (*Calymene nupera*) Geo. Rep. 4th Dist. N. Y., Chemung Gr. [Sig. late, recent.]  
*orestes*, Billings, 1860, Can. Nat. & Geo., vol. 5, Mid. Sil. [Ety. mythological name.]  
*rana*, Green, 1832, (*Calymene bufo var. rana*) Monograph of Trilobites, Ham. Gr. [Sig. a frog.]  
*trisulcata*, Hall, 1843, (*Calymene* (?) *trisulcatus*) Geo. Rep. 4th Dist. N. Y., Clinton Gr. [Sig. three-furrowed.]  
**PHILLIPSIA**, Portlock, 1843, Rep. Geol. Londonderry. [Ety. proper name.]  
*bufo*, Meek & Worthen, 1870, Proc. Acad. Nat. Sci., Keokuk Gr. [Sig. a toad.]  
*cliftonensis*, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]  
*coronata*, Hall, 1877, Ham. Gr. Proposed instead of *P. ornata*, which was preoccupied. [Sig. crowned.]  
*howi*, Billings, 1863, Can. Nat. & Geol., vol. 8, Carboniferous. [Ety. proper name.]  
*insignis*, Winchell, 1863, Proc. Acad. Nat. Sci., Burlington Gr. [Sig. marked.]  
*lævis*, Hall, 1876, Illust. Devonian Foss., Tully limestone. [Sig. smooth.]  
*lodiensis*, Meek, 1875, Ohio Pal., vol. 2, Waverly Gr. [Ety. proper name.]  
*major*, Shumard, 1858, Trans. St. Louis Acad. Sci., vol. 1, Coal Meas. [Sig. larger.]  
*meramecensis*, Shumard, 1855, Geo. Rep. Mo., Archimedes limestone. [Ety. proper name.]  
*minuscula*, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. rather small.]

- missouriensis, Shumard, 1858, Trans. St. Louis Acad. Sci., Coal Meas. [Ety. proper name.]
- ornata*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. The name was preoccupied by Portlock in 1843. See *P. coronata*.
- perannulata*, Shumard, 1858, Trans. St. Louis Acad. Sci., Permian Gr. [Sig. very annulated.]
- portlocki*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci., Keokuk Gr. [Ety. proper name.]
- rockfordensis*, Winchell, 1865, Proc. Acad. Nat. Sci., Kinderhook (?) Gr. [Ety. proper name.]
- sangamonensis*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci., Coal Meas. [Ety. proper name.]
- scitula*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci., Coal Meas. [Sig. pretty.]
- stevensoni*, Meek, 1871, Reg. Rep. University W. Va., Chester Gr. [Ety. proper name.]
- vindobonensis*, Hartt, 1868, Acad. Geol., Carboniferous. [Ety. proper name.]
- Piliolites*, Cozzens, 1848. Not sufficiently defined to be identified.
- ohioensis*, Cozzens, 1848. Not sufficiently defined to be identified, but probably the fragment of a Dalmanites.
- Platynotus*, syn. for *Lichas*.
- boltoni*, see *Lichas boltoni*.
- trentonensis*, see *Lichas trentonensis*.
- PLUMULITES, Barrande. [Ety. *plumula*, a feather; *lithos*, stone.]
- jamesi*, Hall & Whitfield, 1875, Pal. Ohio, vol. 2. [Ety. proper name.]
- PRIMITIA, Jones, 1865, Ann. & Mag. Nat. Hist., 3rd series, vol. 16. A subgenus of *Beyrichia*, founded upon *B. logani* and *Cytheropsis concinna*.
- PROETUS, Steininger, 1830, Bemerkungen über die Versteinerungen welche im Uebergangs-Gebirge der Eifel. [Ety. mythological name.]
- alaricus*, Billings, 1860, Can. Nat. & Geo., vol. 5, Hud. Riv. Gr. [Sig. winged.]
- angustifrons*, Hall, 1861, 15th Reg. Rep. N. Y., Schoharie grit. [Sig. having a front.]
- auriculatus*, Hall, 1861, 15th Reg. Rep. N. Y., Chemung Gr. [Sig. eared.]
- canaliculatus*, Hall, 1861, 15th Reg. Rep. N. Y., Up. Held. Gr. [Sig. channeled.]
- clarus*, Hall, 1861, 15th Reg. Rep. N. Y., Up. Held. Gr. [Sig. clear, manifest.]
- conradi*, Hall, 1861, 15th Reg. Rep. N. Y., Schoharie grit. [Ety. proper name.]
- coryceus*, Conrad, 1842, (Asaphus *coryceus*) Jour. Acad. Nat. Sci., vol. 8, Niagara Gr. [Ety. proper name.]
- crassimarginatus*, Hall, 1843, (Calymene *crassimarginata*) Geo. Rep. 4th Dist. N. Y., Corniferous Gr. [Sig. thick-margined.]
- doris*, Hall, 1860, 13th Reg. Rep. N. Y., Ham. Gr. [Ety. mythological name.]
- ellipticus*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci., Kinderhook Gr. [Sig. elliptical.]
- haldemani*, Hall, 1861, 15th Reg. Rep. N. Y., Ham. Gr. [Ety. proper name.]
- hesione*, Hall, 1861, 15th Reg. Rep. N. Y., Schoharie grit. [Ety. mythological name.]
- longicaudus*, Hall, 1861, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. long-tailed.]
- macrocephalus*, Hall, 1861, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. long-headed.]
- marginalis*, Conrad, 1839, (Calymene *marginalis*) Ann. Geo. Rep. N. Y., Tully limestone. [Sig. margined.]
- missouriensis*, Shumard, 1855, Geo. Rep. Mo., Low. Carb. [Ety. proper name.]
- occidens*, Hall, 1861, 15th Reg. Rep. N. Y., Ham. Gr. [Sig. western.]
- parviusculus*, Hall, 1866, Pamphlet, Cin'ti Gr. [Sig. very small.]
- phocion*, Billings, 1874, Pal. Foss., vol. 2, Devonian. [Ety. proper name.]
- planimarginatus*, Meek, 1871, Proc. Acad. Nat. Sci. Phil., Corniferous Gr. [Sig. flat-margined.]
- protuberans*, Hall, 1859, Pal. N. Y., vol. 3, Low. Held. Gr. [Sig. protuberant.]
- prouti*, Shumard, 1863, Trans. St. Louis Acad. Sci., Ham. Gr. [Ety. proper name.]
- rowii*, Green, 1838, (Calymene *rowii*) Am. Jour. Sci., vol. 38, Ham Gr. [Ety. proper name.]
- spurlocki*, Meek, 1872, Am. Jour. Sci., 3rd series, vol. 3, Cin'ti Gr. [Ety. proper name.]
- stokesi*, Murchison, 1839, (Asaphus *stokesii*) Sil. Syst., Niagara Gr. [Ety. proper name.]
- swalлови*, Shumard, 1855, Geo. Rep. Mo., Chemung Gr. [Ety. proper name.]
- verneuili*, Hall, 1861, 15th Reg. Rep. N. Y., Up. Held. Gr. [Ety. proper name.]
- PROTICHNITES, Owen, 1852, Jour. Geo. Soc., vol. 8. [Ety. *protos*, first; *ichnos*, footprint or track; *lithos*, stone.]
- acadicus*, Dawson, 1863, Am. Jour. Sci. & Arts, 3rd ser., vol. 5, Coal Meas. [Ety. proper name.]
- alternans*, Owen, 1852, Jour. Geo. Soc., vol. 8, Quebec Gr. [Sig. alternating.]
- carbonarius*, Dawson, 1863, Am. Jour. Sci. & Arts, 3rd ser., vol. 5, Coal Meas. [Sig. pertaining to coal.]
- latus*, Owen, 1852, Jour. Geo. Soc., vol. 8, Quebec Gr. [Sig. wide.]
- lineatus*, Owen, 1852, Jour. Geo. Soc., vol. 8, Quebec Gr. [Sig. lined.]
- logananus*, Marsh, 1869, Am. Jour. Sci. & Arts, 2d ser., vol. 48, Potsdam Gr. [Ety. proper name.]
- multinotatus*, Owen, 1852, Jour. Geo. Soc., vol. 8, Quebec Gr. [Sig. many marks or tracks.]
- octo-notatus*, Owen, 1852, Jour. Geo. Soc., vol. 8, Quebec Gr. [Sig. having eight marks or tracks.]

- septem-notatus, Owen, 1852, Jour. Geo. Soc., vol. 8, Quebec Gr. [Sig. having seven marks.]
- PTERYGOTUS**, Agassiz, 1839, in Murch. Sil. Syst. [Ety. *pteron*, wing; *ous*, ear.]
- cobbi, Hall, 1859, Pal. N. Y., vol. 8, Waterlime Gr. [Ety. proper.]
- macrophthalmus, Hall, 1859, Pal. N. Y., vol. 3, Waterlime Gr. [Sig. long-eyed.]
- osborni, Hall, 1859, Pal. N. Y., vol. 3, Waterlime Gr. [Ety. proper name.]
- PTYCHASPIS**, Hall, 1863, 16th Reg. Rep. N. Y. [Ety. *ptyche*, folding or doubling; *aspis*, a shield.]
- barabuenensis, Winchell, 1864, Am. Jour. Sci. & Arts, 2d series, vol. 37, Potsdam Gr. [Ety. proper name.]
- granulosa, Owen, 1852, (Dikelocephalus granulatus) Rep. Iowa, Wis. & Minn., Potsdam Gr. [Sig. covered with granules.]
- miniscaensis, Owen, 1852, (Dikelocephalus miniscaensis) Rep. Wis., Iowa & Minn., Potsdam Gr. [Ety. proper name.]
- sesostris, Billings, 1865, (Dikelocephalus sesostris) Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]
- REMOPLEURIDES**, Portlock, 1843, Rep. Geol. Lond. [Ety. *remus*, an oar; *pleura*, a rib.]
- affinis, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. related to.]
- canadensis, Billings, 1865, Pal. Foss., vol. 1, Chazy Gr. [Ety. proper name.]
- panderi, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]
- schlothelmi, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]
- striatulus, Walcott, 1875, Cin. Quar. Jour. Sci., vol. 2, Trenton Gr. [Sig. having little striae.]
- Rhabdichnites*, Dawson, 1875, Can. Nat. & Geo. Name proposed.
- RUSICHNITES**, Dawson, 1861, Can. Nat. & Geo. [Ety. *rusos*, wrinkled; *ichnos*, a track.] Supposed track of a small *Limulus*.
- acadicus, Dawson, 1861, Can. Nat. & Geo., Coal Meas. [Ety. proper name.]
- SHUMARDIA**, Billings, 1862, Pal. Foss., vol. 1. [Ety. proper name.]
- glacialis, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Sig. icy, frozen.]
- granulosa, Billings, 1862, Pal. Foss., vol. 1, Quebec Gr. [Sig. covered with granules.]
- Solenocaris*, Meek, 1872, subgenus of *Ceratiocaris*.
- SOLENOPLEURA**, as used by Billings, 1874, Pal. Foss., vol. 2. [Ety. *Solen*, the razor fish; *pleura*, a rib.]
- communis, Billings, 1874, Pal. Foss., vol. 2, Potsdam Gr. [Sig. common, in large numbers.]
- SPHÆREXOCHUS**, Beyrich, 1845, Monograph of Trilobites. [Ety. *sphaira*, a ball; *exochos*, prominent.]
- canadensis, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Ety. proper name.]
- mirus*, Beyrich, see *Sphærexochus romingeri*.
- parvus, Billings, 1865, Pal. Foss., Chazy & Black Riv. Gr. [Sig. small.]
- romingeri, Hall, 1867, 20th Reg. Rep. N. Y., Niagara Gr. [Ety. proper name.]
- SPHÆROCORYPHE**, Angelin, 1852, Palæontologia Scandinavica. [Ety. *sphaira*, a ball; *koryphe*, the top of the head.]
- robustus, Walcott, 1875, Cin. Quar. Jour. Sci., vol. 2, Trenton Gr. [Sig. robust.]
- salteri, Billings, 1866, Catal. Sil. Foss. Antic., Anticosti Gr. [Ety. proper name.]
- TELEPHUS**, Barrande. [Ety. mythological name.]
- americanus, Billings, 1865, Pal. Foss., vol. 1, Quebec Gr. [Ety. proper name.]
- TERATASPIS**, Hall, 1863, 16th Reg. Rep. N. Y. [Ety. *teras*, a marvel; *aspis*, shield.] A subgenus of *Acidaspis*.
- grandis, Hall, 1862, 15th Reg. Rep. N. Y., (Lichas grandis) Schoharie grit. [Sig. grand.]
- eripia, Hall, 1863, (Lichas eripis) 16th Reg. Rep. N. Y., Up. Held. Gr. [Ety. mythological name.]
- THALEOPS**, Conrad, 1843, Proc. Acad. Nat. Sci., vol. 1. [Ety. *thalos*, a stalk; *ops*, an eye.]
- ovata, Conrad, 1843, Proc. Acad. Nat. Sci., vol. 1, Trenton Gr. [Sig. ovate.]
- TRIARTHRELLA**, Hall, 1863, 16th Reg. Rep. N. Y. [Ety. diminutive of *Triarthrus*.]
- auroralis, Hall, 1863, 16th Reg. Rep. N. Y., Potsdam Gr. [Sig. in the morning.]
- TRIARTHURUS**, Green, 1832, Monograph of Trilobites. [Ety. *triarthrus*, three-jointed.]
- becki, Green, 1832, Monograph of Trilobites, Trenton & Hud. Riv. Gr. [Ety. proper name.]
- spinus, Billings, 1857, Rep. of Progr., Trenton Gr. [Sig. full of spines.]
- trilineatus, Emmons, 1844, (Atops trilineatus) Taconic Syst., Potsdam Gr. [Sig. three-lined.]
- Trimerus*, syn. for *Homalonotus*.
- delphinocephalus*, see *Homalonotus delphinocephalus*.
- jacksoni*, see *Homalonotus jacksoni*.
- TRINUCLEUS**, Lhwyd, (or as he spelt it Lhwydd) 1698, Phil. Trans., vol. 20. [Ety. *trinucleus*, three-kerneled.]
- concentricus, Eaton, 1832, (Nuttainia concentrica) Geo. Text Book, Trenton & Hud. Riv. Gr. [Sig. from the concentric arrangement of the punctures.]
- tessellatus*, Green, 1832, (Cryptolithus tessellatus) syn. for *Trinucleus concentricus*.

# CLASS ARACHNIDA.

GENERA.—Architarbus, Arthrolycosa, Eoscorpius, Mazonia.

- |  |   |
|--|---|
| <p>ARCHITARBUS, Scudder, 1868, Geo. Sur. Ill., vol. 3. [Ety. <i>arche</i>, beginning; <i>tarbos</i>, object of alarm.]</p> <p>rotundatus, Scudder, 1868, Geo. Sur. Ill., vol. 3, Coal Meas. [Sig. rounded.]</p> <p>ARTHROLYCOSA, Harger, 1874, Am. Jour. Sci., 3rd series, vol. 7. [Ety. <i>arthron</i>, a joint; <i>lykos</i>, a spider.]</p> <p>antiqua, Harger, 1874, Am. Jour. Sci., 3d ser., vol. 7, Coal Meas. [Sig. ancient.]</p> | <p>EOSCORPIUS, Meek &amp; Worthen, 1868, Am. Jour. Sci., vol. 45. [Ety. <i>eos</i>, dawn; <i>scorpius</i>, a scorpion.]</p> <p>carbonarius, Meek &amp; Worthen, 1868, Am. Jour. Sci., vol. 45, Coal Meas. [Sig. pertaining to coal.]</p> <p>MAZONIA, Meek &amp; Worthen, 1868, Geo. Sur. Ill., vol. 3. [Ety. proper name.]</p> <p>woodana, Meek &amp; Worthen, 1868, Geo. Sur. Ill., vol. 3, Coal Meas. [Ety. proper name.]</p> |
|--|---|

# CLASS MYRIAPODA.

GENERA.—Anthracerpes, Archiulus, Euphoberia, Xylobius.

- |   |  |
|---|--|
| <p>ANTHRACERPES, Meek &amp; Worthen, 1865, Proc. Acad. Nat. Sci. Phil. [Ety. <i>anthrax</i>, coal; <i>erpo</i>, to creep; in allusion to its Carboniferous age and probable habits.]</p> <p>typus, Meek &amp; Worthen, 1865, Proc. Acad. Nat. Sci., Coal Meas. [Ety. type of the genus.] This is probably a worm.</p> <p>ARCHIULUS, Scudder, 1868, Mem. Bost. Soc. Nat. Hist., vol. 2. [Ety. <i>arche</i>, beginning; <i>ioulos</i>, a wood louse.]</p> <p>xylobioides, Scudder, 1868, Mem. Bost. Soc. Nat. Hist., vol. 2, Coal Meas. [Ety. from its resemblance to the genus Xylobius.]</p> <p>EUPHOBERIA, Meek &amp; Worthen, 1868, Am. Jour. Sci., vol. 45. [Ety. <i>eu</i>, very; <i>phoberos</i>, formidable.]</p> | <p>armigera, Meek &amp; Worthen, 1868, Am. Jour. Sci., vol. 45, Coal Meas. [Sig. armed.]</p> <p>major, Meek &amp; Worthen, 1868, Am. Jour. Sci., vol. 45, Coal Meas. [Sig. large.]</p> <p>XYLOBIUS, Dawson, 1860, Quar. Jour. Geo. Soc., vol. 16. [Ety. <i>xylobius</i>, living in wood.]</p> <p>dawsoni, Scudder, 1868, Mem. Bost. Soc. Nat. Hist., vol. 1, Coal Meas. [Ety. proper name.]</p> <p>fractus, Scudder, 1868, Mem. Bost. Soc. Nat. Hist., vol. 2, Coal Meas. [Sig. frail.]</p> <p>sigillariae, Dawson, 1860, Quar. Jour. Sci., vol. 16, Coal Meas. [Sig. from the <i>Sigillaria</i> in which it was found.]</p> <p>similis, Scudder, 1868, Mem. Bost. Soc. Nat. Hist., vol. 2, Coal Meas. [Sig. similar.]</p> |
|---|--|

# CLASS INSECTA.

ORDER NEUROPTERA.—Chrestotes, Dyscritus, Ephemerites, Gerephemera, Haplophlebius, Hemeristia, Homothetus, Libellula, Lithentomum, Megathentomum, Miamia, Paolia, Platephemera, Xenoneura.

ORDER ORTHOPTERA.—Archegogryllus, Archimylacris, Blattina, Mylacris.

INCERTÆ SEDIS—Palæocampa.

- ARCHEGOGRYLLUS**, Scudder, 1868, Proc. Bost. Soc. Nat. Hist. [Ety. *archegos*, first in time; *gryllus*, a cricket.]
- priscus*, Scudder, 1868, Proc. Bost. Soc. Nat. Hist., Coal Meas. [Sig. ancient.]
- ARCHIMYLACRIS**, Scudder, 1868, Acad. Geol. [Ety. *arche*, beginning; *Mylacris*, cockroach.]
- acadica*, Scudder, 1868, Acad. Geol., Low. Carb. [Ety. proper name.]
- mantis*, Scudder, 1868, Geo. Sur. Ill., vol. 3, Coal Meas. [Ety. *Mantis*, a genus of insects.]
- BLATTINA**, Burmeister, 1838, Handbuch der Entomologie. [Ety. *Blatta*, a cockroach.]
- bretonensis*, Scudder, 1875, Can. Nat., n. s., vol. 7, Carboniferous. [Ety. proper name.]
- heeri*, Scudder, 1868, Geo. Sur. Ill., vol. 3, Coal Meas. [Ety. proper name.]
- sepulta*, Scudder, 1876, Can. Nat. & Geo., vol. 8, Carboniferous. [Sig. lulled to sleep, buried.]
- venusta*, Lesquereux, 1860, Geo. Ark., vol. 2, Coal Meas. [Sig. handsome.]
- CHRESTOTES**, Scudder, 1868, Geo. Sur. Ill., vol. 3. [Ety. *chrestotes*, good of its kind.]
- lapidea*, Scudder, 1868, Geo. Sur. Ill., vol. 3, Coal Meas. [Sig. stony.]
- DYSCRITUS**, Scudder, 1868, Geo. Mag., vol. 5. [Ety. *dyscritos*, hard to determine, doubtful.]
- vetustus*, Scudder, 1868, Geo. Mag., vol. 5, Devonian. [Sig. ancient.]
- EPHEMERITES**, Scudder, 1868, Geo. Sur. Ill., vol. 3. [Ety. from resemblance to the *Ephemera*.]
- affinis*, Scudder, 1868, Geo. Sur. Ill., vol. 3, Coal Meas. [Sig. related to.]
- gigas*, Scudder, 1868, Geo. Sur. Ill., vol. 3, Coal Meas. [Sig. large.]
- simplex*, Scudder, 1868, Geo. Sur. Ill., vol. 3, Coal Meas. [Sig. simple.]
- GEREPHEMERA**, Scudder, 1868, Geo. Mag., vol. 5. [Ety. *geros*, old; *Ephemera*, a genus of insects.]
- simplex*, Scudder, 1868, Geo. Mag., vol. 5, Devonian. [Sig. simple.]
- HAPLOPHLEBIUM**, Scudder, 1867, Can. Nat. & Geo., 2d ser., vol. 3. [Ety. *haplos*, simple; *phlebius*, a vein.]
- barnesi*, Scudder, 1867, Can. Nat. & Geo., 2d ser., vol. 3, Coal Meas. [Ety. proper name.]
- HEMERISTIA**, Dana, 1864, Am. Jour. Sci. & Arts, 2d ser., vol. 37. [Ety. *hemera*, day.]
- occidentalis*, Dana, 1864, Am. Jour. Sci. & Arts, 2d ser., vol. 37, Coal Meas. [Sig. western.]
- HOMOTHETUS**, Scudder, 1867, Can. Nat. & Geo., 2d series, vol. 3. [Ety. *homos*, similar; *thesis*, placed.]
- fossilis*, Scudder, 1867, Can. Nat. & Geo., 2d series, vol. 3, Ham. or Chemung Gr. [Sig. fossil, extinct.]
- LIBELLULA**, Fabricius, 1776, as identified by Scudder.
- carbonaria*, Scudder, 1876, Can. Nat. & Geo., vol. 8, Coal Meas. [Sig. pertaining to coal.]
- LITHENTOMUM**, Scudder, 1867, Can. Nat. & Geo., 2d series, vol. 3. [Ety. *lithos*, stone; *entomon*, an insect.]
- harti*, Scudder, 1867, Can. Nat. & Geo., 2d series, vol. 3, Ham. or Chemung Gr. [Ety. proper name.]
- MEGATHENTOMUM**, Scudder, 1868, Geo. Sur. Ill., vol. 3. [Ety. *megathos*, largeness; *entomon*, an insect.]
- pustulatum*, Scudder, 1868, Geo. Sur. Ill., vol. 3, Coal Meas. [Sig. covered with pustules.]
- MIAMIA**, Dana, 1864, Am. Jour. Sci. & Arts, 2d ser., vol. 37. [Ety. proper name.]
- bronsoni*, Dana, 1864, Am. Jour. Sci. & Arts, 2d ser., vol. 37, Coal Meas. [Ety. proper name.]



- danæ*, Scudder, 1868, Geo. Sur. Ill., vol. 3, Coal Meas. [Ety. proper name.]
- MYLACRIS**, Scudder, 1868, Geo. Sur. Ill., vol. 3. [Ety. *mulakris*, a kind of cockroach.]
- anthracophila*, Scudder, 1868, Geo. Sur. Ill., vol. 3, Coal Meas. [Ety. *anthrax*, coal; *philo*, I like.]
- PALÆOCAMPA**, Meek & Worthen, 1865, Proc. Acad. Nat. Sci. [Ety. *palaïos*, ancient; *kampe*, a caterpillar.]
- anthrax*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci., Coal Meas. [Ety. *anthrax*, coal; in allusion to the Carboniferous age of the species.]
- PAOLIA**, Smith, 1871, Am. Jour. Sci. & Arts, 3rd series, vol. 1. [Ety. proper name.]
- vetusta*, Smith, 1871, Am. Jour. Sci., 3rd series, vol. 1, Coal Meas. [Sig. ancient.]
- PLATEPHEMERA**, Scudder, 1867, Can. Nat. & Geo., 2nd series, vol. 3. [Ety. *platys*, flat; *ephemera*, an insect.]
- antiqua*, Scudder, 1867, Can. Nat. & Geo., 2d series, vol. 3, Ham. or Chemung Gr. [Sig. ancient.]
- XENONEURA**, Scudder, 1867, Can. Nat. & Geo., 2nd series, vol. 3. [Ety. *xenos*, new, strange; *neura*, a nerve.]
- antiquorum*, Scudder, 1867, Can. Nat. & Geo., 2nd series, vol. 3, Ham. or Chemung Gr. [Sig. ancient.]

# SUB-KINGDOM VERTEBRATA.

---

FIRST CLASS,	-	-	-	-	-	PISCES.
SECOND CLASS,	-	-	-	-	-	REPTILIA.

---

## CLASS PISCES.

- ORDER GANOIDEI.—*Acanthaspis*, *Acantholepis*, *Acrolepis*, *Amblypterus*, *Anaclitacanthus*, *Aspidichthys*, *Asterosteus*, *Catopterus*, *Cephalaspis*, *Coccosteus*, *Cœlacanthus*, *Conchodus*, *Ctenodus*, *Cyrtacanthus*, *Dinichthys*, *Dipterus*, *Eurylepis*, *Heliodus*, *Holoptychius*, *Liognathus*, *Macropetalichthys*, *Mecolepis*, *Onychodus*, *Palæoniscus*, *Peplorhina*, *Platysomus*, *Pterichthys*, *Pygopterus*, *Rhizodus*, *Rhynchodus*.
- ORDER SELACHII.—*Acondylacanthus*, *Agassizodus*, *Amacanthus*, *Antliodus*, *Apedodus*, *Aspidodus*, *Asteroptychius*, *Batacanthus*, *Bathycheilodus*, *Bythiacanthus*, *Calopodus*, *Carcharopsis*, *Cheirodus*, *Cholodus*, *Chomatodus*, *Cladodus*, *Climaxodus*, *Cochliodus*, *Compsacanthus*, *Ctenacanthus*, *Ctenopetalus*, *Ctenoptychius*, *Cymatodus*, *Dactylodus*, *Deltodus*, *Desmiodus*, *Diplodus*, *Drepanacanthus*, *Edestes*, *Erismacanthus*, *Fissodus*, *Gampsacanthus*, *Geisacanthus*, *Glymmatacanthus*, *Gyracanthus*, *Harpacodus*, *Helodus*, *Hybocladodus*, *Lambdodus*, *Lecracanthus*, *Leiodus*, *Leptophractus*, *Lisgodus*, *Listracanthus*, *Machæracanthus*, *Marracanthus*, *Mesodmodus*, *Oracanthus*, *Orodus*, *Orthacanthus*, *Peltodus*, *Periplectrodus*, *Peripristis*, *Petalodus*, *Petalorhynchus*, *Petrodus*, *Phœbodus*, *Physonemus*, *Platyodus*, *Pleuracanthus*, *Pnigeacanthus*, *Pœcilodus*, *Polyrhizodus*, *Pristicladodus*, *Pristodus*, *Psammodus*, *Psephodus*, *Ptyctodus*, *Sandalodus*, *Stemmatodus*, *Stenacanthus*, *Tanaodus*, *Thrina-codus*, *Trigonodus*, *Venustodus*, *Xystracanthus*, *Xystrodus*.

---

<i>ACANTHASPIS</i> , Newberry, 1875, Ohio Pal., vol. 2. [Ety. <i>akantha</i> , spine; <i>aspis</i> , a shield.]	<i>gracilis</i> , St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. slender.]
<i>armata</i> , Newberry, 1875, Ohio Pal., vol. 2, Corniferous Gr. [Sig. armed.]	<i>occidentalis</i> , Newberry & Worthen, 1866, (Leptacanthus occidentalis) Geo. Sur. Ill., vol. 2, St. Louis Gr. [Sig. western.]
<i>ACANTHOLEPIS</i> , Newberry, 1875, Ohio Pal., vol. 2. [Ety. <i>akantha</i> , a spine; <i>lepis</i> , a scale.]	<i>ACROLEPIS</i> , Agassiz, 1843, Recherches Poiss. Foss. [Ety. <i>akros</i> , sharp; <i>lepis</i> , a scale.]
<i>pustulosa</i> , Newberry, 1875, Ohio Pal., vol. 2, Corniferous Gr. [Sig. covered with pustules.]	<i>hortonensis</i> , Dawson, 1868, Acad. Geol., Carboniferous. [Ety. proper name.]
<i>ACONDYLACANTHUS</i> , St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. <i>akondylos</i> , without bony knobs; <i>akantha</i> , a spine.]	<i>Agassichthys</i> , syn. for <i>Macropetalichthys</i> .
<i>æquicostatus</i> , St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. equal ribbed.]	<i>manni</i> , see <i>Macropetalichthys manni</i> .
	<i>sullivanti</i> , see <i>Macropetalichthys sullivanti</i> .

- AGASSIZODUS**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. proper name; *odous*, tooth.]  
*corrugatus*, Newberry & Worthen, 1870, (*Orodus corrugatus*) Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. wrinkled.]  
*scitulus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Sig. pretty, neat.]  
*variabilis*, Newberry & Worthen, 1870, (*Lophodus variabilis*) Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. variable.]  
*virginianus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Ety. proper name.]
- AMACANTHUS**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *anakanthos*, destitute of prickles.]  
*gibbosus*, Newberry & Worthen, 1866, (*Homacanthus gibbosus*) Geo. Sur. Ill., vol. 2, St. Louis Gr. [Sig. gibbous.]
- AMBLYPTERUS**, Agassiz, 1833, Recherches sur les Poissons Fossiles. [Ety. *amblys*, blunt; *pteron*, fin.]  
*macropterus*, Agassiz, 1835, Recherch. Poiss. Foss., vol. 2, Coal Meas. [Sig. large-finned.]
- ANACLITACANTHUS**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *anakkitos*, leant upon; *akantha*, a spine.]  
*semicostatus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. half-ribbed.]
- ANTLIODUS**, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2. [Ety. *antlia*, a depression; *odous*, a tooth.]  
*cucullus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. a covering.]  
*gracilis*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Warsaw Gr. [Sig. slender.]  
*minutus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. small.]  
*mucronatus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, St. Louis Gr. [Sig. sharp-pointed.]  
*parvulus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Burlington Gr. [Sig. very small.]  
*perovalis*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Warsaw Gr. [Sig. very ovate.]  
*robustus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. robust.]  
*politus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. smoothed.]  
*sarcululus*, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Burlington Gr. [Sig. a little hoe.]  
*similis*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. similar.]
- simplex*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Burlington Gr. [Sig. simple.]  
*sulcatus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. furrowed.]
- APEDODUS**, Leidy, 1856, Jour. Acad. Nat. Sci., 2d ser., vol. 3. [Ety. *apedos*, level, smooth; *odous*, tooth.]  
*priscus*, Leidy, 1856, Jour. Acad. Nat. Sci., 2d ser., vol. 3, Chemung Gr. [Sig. ancient.]
- ASPIDICHTHYS**, Newberry, 1873, Ohio Pal., vol. 1. [Ety. *aspis*, a shield; *ichthys*, a fish.]  
*clavatus*, Newberry, 1873, Ohio Pal., vol. 1, Portage Gr. [Sig. club-shaped.]
- ASPIDODUS**, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2. [Ety. *aspis*, a shield; *odous*, tooth.]  
*convolutus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. rolled as it were together.]  
*crenulatus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. crenulated, zigzag.]
- ASTERACANTHUS**, Agassiz, 1837, Recherches sur les Poissons Fossiles. [Ety. *aster*, star; *akantha*, spine.]  
*siderius*, Leidy, see *Bythiacanthus siderius*.
- ASTEROPTYCHIUS**, Agassiz, 1843, Recherches sur les Poissons Fossiles. [Ety. *aster*, a star; *ptyche*, a wrinkle.]  
*bellulus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Sig. pretty, neat.]  
*keokuk*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Ety. proper name.]  
*st. ludovici*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Ety. proper name.]  
*tenuis*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. slender.]  
*triangularis*, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Burlington Gr. [Sig. triangular.]  
*vetustus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. ancient.]
- ASTEROSTEUS**, Newberry, 1875, Ohio Pal., vol. 2. [Ety. *aster*, a star; *osteon*, a bone.]  
*stenocephalus*, Newberry, 1875, Ohio Pal., vol. 2, Corniferous Gr. [Sig. narrow-headed.]
- BATACANTHUS**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *batos*, a prickly bush; *akantha*, a spine.]  
*baculiformis*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. staff-shaped.]  
*stellatus*, Newberry & Worthen, 1866, (*Drepanacanthus* (?) *stellatus*) Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. starred.]

- BATHYCHEILODUS**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *bathys*, deep; *cheilos*, lip; *odous*, tooth.]
- macisaacsi**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Devonian. [Ety. proper name.]
- BYTHIACANTHUS**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *bythios*, deep; *akantha*, a spine.]
- siderius**, Leidy, 1873, (*Asteracanthus siderius*) Ext. Vert. Fauna, Low. Carb. [Sig. starred.]
- vanhornei**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Ety. proper name.]
- CALOPODUS**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Sig. a shoemaker's last.]
- apicalis**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Sig. sharp-pointed.]
- CARCHAROPODIS**, Agassiz, 1843, *Recherches sur les Poissons Fossiles*. [Ety. *carcharopsis*, shark-like.]
- wortheni**, Newberry, 1866, Geo. Sur. Ill., vol. 2, Low. Carb. [Ety. proper name.]
- CATOPTERUS**, Redfield, 1841, *Annals N. Y. Lyceum*, vol. 4. [Ety. *kata*, on the lower side; *pteron*, a fin.]
- macrurus**, Redfield, 1841, *Am. Jour. Sci.*, vol. 41, Carboniferous. [Sig. large-finned.]
- CEPHALASPIS**, Agassiz, 1835, *Recherch. Pois. Foss.* [Ety. *kephale*, head; *aspis*, a shield.]
- dawsoni**, Lankester, 1870, *London Geo. Mag.*, Devonian. [Ety. proper name.]
- CHEIRODUS**, McCoy, 1848, *Ann. & Mag. Nat. Hist.* [Ety. *cheir*, the hand; *odous*, tooth.]
- acutus**, Newberry, 1857, *Proc. Acad. Nat. Sci.*, vol. 8, Coal Meas. [Sig. sharp-pointed.]
- CHOLODUS**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *cholos*, defective; *odous*, tooth.]
- inæqualis**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Sig. unequal.]
- CHOMATODUS**, Agassiz, 1838, *Recherches sur les Poissons Fossiles*. [Ety. *choma*, a pile or heap; *odous*, tooth.]
- affinis**, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. near to.]
- angularis**, see *Tanaodus angularis*.
- arcuatus**, St. John, 1870, *Proc. Am. Phil. Soc.*, vol. 2, Coal Meas. [Sig. arched.]
- chesterensis**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Ety. proper name.]
- comptus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. elegant.]
- costatus**, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. ribbed.]
- cultellus**, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. a small knife.]
- elegans**, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. elegant.]
- gracillimus**, see *Tanaodus gracillimus*.
- inconstans**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. not constant in form or size.]
- incrassatus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. thickened.]
- insignis**, Leidy, 1856, *Trans. Am. Phil. Soc.*, vol. 11, St. Louis Gr. [Sig. marked.]
- linearis**, Agassiz, 1838, (*Psammodus linearis*) *Recherches Pois. Foss.*, Low. Carb. [Sig. lined.]
- loriformis**, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. like a thong or whip.]
- molaris**, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. like a molar or grinder.]
- multiplicatus**, see *Tanaodus multiplicatus*.
- obscurus**, see *Tanaodus obscurus*.
- parallelus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Warsaw Gr. [Sig. parallel.]
- pusillus**, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. very small.]
- varsoviensis**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Warsaw Gr. [Ety. proper name.]
- venustus**, Leidy, see *Venustodus leidyi*, where the specific name is made to designate the genus, and the author the specific name, contrary to the rules of nomenclature; also see *Venustodus venustus*.
- CLADODUS**, Agassiz, 1843, *Recherches sur les Poissons Fossiles*. [Ety. *klados*, a twig; *odous*, tooth.]
- acuminatus**, Newberry, 1857, *Proc. Acad. Nat. Sci. Phil.*, vol. 8, Low. Carb. [Sig. sharp-pointed; from the extreme sharpness of the central and lateral denticles.]
- alternatus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. alternating.]
- angulatus**, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. angular.]
- bellifer**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. war-like, martial.]
- carinatus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Sig. keeled.]
- concinus**, Newberry, 1875, *Ohio Pal.*, vol. 2, Portage Gr. [Sig. handsome.]
- costatus**, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. ribbed, having prominent ridges.]

- deflexus*, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Burlington Gr. [Sig. downward, turned aside.]  
*eccentricus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. eccentric.]  
*elegans*, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. elegant.]  
*euglypheus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. well carved, distinctly marked.]  
*exiguus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. small.]  
*exilis*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. small, slender.]  
*ferox*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, St. Louis Gr. [Sig. fierce, sharp-pointed.]  
*fulleri*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Ety. proper name.]  
*gomphoides*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. like a club.]  
*gracilis*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. slender.]  
*grandis*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. great.]  
*hertzeri*, Newberry, 1875, Ohio Pal., vol. 2, Portage Gr. [Ety. proper name.]  
*intercostatus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. intercostated, ridge within ridge.]  
*ischypus*, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, St. Louis Gr. [Sig. strong-footed.]  
*lamnoides*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Kinderhook Gr. [Ety. from resemblance to the teeth of the living *Lamna*.]  
*magnificus*, Tuomey, 1858, 2d Rep. Geo. Ala., Low. Carb. [Sig. magnificent.]  
*micropus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. small footed.]  
*mortifer*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. death dealing, deadly.]  
*newmani*, Tuomey, 1856, Geo. Alabama, Low. Carb. [Ety. proper name.]  
*pandatus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Sig. bent downward.]  
*parvulus*, Newberry, 1875, Ohio Pal., vol. 2, Portage Gr. [Sig. very small.]  
*pattersoni*, Newberry, 1875, Ohio Pal., vol. 2, Waverly Gr. [Ety. proper name.]  
*politus*, Newberry & Worthen, 1875, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. smoothed.]  
*prænuntius*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. a foreteller, harbinger.]  
*rariocostatus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. having few ridges; from a few diverging thread-like striae on the outer face of the principal cone.]  
*robustus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. robust.]  
*romingeri*, Newberry, 1875, Ohio Pal., vol. 2, Waverly Gr. [Ety. proper name.]  
*spinosus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, St. Louis Gr. [Sig. full of spines.]  
*springeri*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Ety. proper name.]  
*stenopus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, St. Louis Gr. [Sig. narrow-footed.]  
*subulatus*, Newberry, 1875, Ohio Pal., vol. 2, St. Louis Gr. [Sig. awl-shaped, subulate.]  
*succinctus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. girded, contracted, short.]  
*turritus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. fortified, turreted.]  
*vanhornei*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Ety. proper name.]  
*wachsmuthi*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Ety. proper name.]  
*zygopus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. with joined feet.]  
*CLIMAXODUS*, McCoy, 1848, Ann. & Mag. Nat. Hist. [Ety. *klimax*, a ladder; *odous*, a tooth.]  
*brevis*, Newberry, 1857, Proc. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. short.]  
*COCCOSTEUS*, Agassiz, 1843, Recherch. Pois. Foss., vol. 2. [Ety. *kokkos*, a berry; *osteon*, a bone.]  
*occidentalis*, Newberry, 1874, Ohio Pal., vol. 2, Corniferous Gr. [Sig. western.]  
*COCHLIODUS*, Agassiz, 1838, Recherches sur les Poissons Fossiles. [Ety. *kochlias*, a cockle; *odous*, a tooth.]  
*costatus*, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Burlington Gr. [Sig. ribbed.]  
*crassus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. thick.]  
*nobilis*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. noble.]  
*CELACANTHUS*, Agassiz, 1843, Recherches sur les Poissons Fossiles. [Ety. *kailos*, hollow; *akantha*, spine.]  
*elegans*, Newberry, 1857, Proc. Acad. Nat. Sci. Phil., vol. 8, Coal Meas. [Sig. elegant.]  
*ornatus*, Newberry, 1857, Proc. Acad. Nat. Sci. Phil., vol. 8, Coal Meas. [Sig. adorned.]

- robustus, Newberry, 1857, Proc. Acad. Nat. Sci. Phil., vol. 8, Coal Meas. [Sig. robust.]
- COMPSCACANTHUS, Newberry, 1857, Proc. Acad. Nat. Sci., vol. 8. [Ety. *compos*, elegant; *akantha*, a spine.]
- laevis, Newberry, 1857, Proc. Acad. Nat. Sci. Phil., vol. 8, Coal Meas. [Sig. smooth.]
- Conchiopsis, syn. for Coelacanthus.
- anguliferus, syn. for Coelacanthus elegans.
- exanthematicus, syn. for Peplorhina anthracina.
- filiferus, syn. for Coelacanthus elegans.
- CONCHODUS, McCoy, 1848, Ann. & Mag. Nat. Hist., 2d ser., vol. 2. [Ety. *conchos*, a shell; *odus*, a tooth.]
- plicatus, Dawson, 1868, Acad. Geol., Coal Meas. [Sig. plicated.]
- CTENACANTHUS, Agassiz, 1837, Recherches sur les Poissons Fossiles. [Ety. *ktenos*, a comb; *akantha*, a spine.]
- angulatus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. angular.]
- burlingtonensis, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Ety. proper name.]
- costatus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, St. Louis Gr. [Sig. ribbed.]
- elegans, Tuomey, 1858, Geo. Ala., Low. Carb. [Sig. elegant.]
- excavatus, St. John & Worthen, 1866, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. excavated.]
- formosus, Newberry, 1873, Ohio Pal., vol. 1, Waverly Gr. [Sig. beautiful.]
- furcicarinatus, Newberry, 1875, Ohio Pal., vol. 2, Waverly Gr. [Sig. forked and keeled.]
- gemmatus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. having buds.]
- gracillimus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, St. Louis Gr. [Sig. very slender.]
- grado-costatus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. having steps and ribs.]
- keokuk, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Ety. proper name.]
- marshi, Newberry, 1873, Ohio Pal., vol. 1, Coal Meas. [Ety. proper name.]
- mayi, Newberry & Worthen, 1866, Ohio Pal., vol. 1, Burlington Gr. [Ety. proper name.]
- parvulus, Newberry, 1875, Ohio Pal., vol. 2, Cleveland shale. [Sig. very small.]
- pugiunculus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. a small dagger.]
- sculptus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. engraved.]
- similis, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. similar.]
- speciosus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. beautiful.]
- spectabilis, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. remarkable.]
- triangularis, Newberry, 1873, Ohio Pal., vol. 1, Waverly Gr. [Sig. triangular.]
- varians, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. variable.]
- vetustus, Newberry, 1873, Ohio Pal., vol. 1, Portage Gr. [Sig. ancient.]
- CTENODUS, Agassiz, 1838, Recherches sur les Poissons Fossiles. [Ety. *ktenos*, a comb; *odus*, a tooth.]
- ohioensis, Cope, 1874, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Ety. proper name.]
- reticulatus, Newberry, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. like network.]
- serratus, Newberry, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. saw-edged, serrated.]
- CTENOPETALUS, Agassiz, 1869, Catal. Foss. Fish, Collection of Earl of Enniskillen. [Ety. *ktenos*, a comb; *petalos*, broad, full grown.]
- bellulus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. very beautiful.]
- limatulus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. like a little file.]
- medius, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. intermediate.]
- occidentalis, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Sig. western.]
- vinosus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. full of wine.]
- CTENOPTYCHIUS, Agassiz, 1838, Recherches sur les Poissons Fossiles. [Ety. *ktenos*, a comb; *ptyche*, a wrinkle.]
- cristatus, Dawson, 1868, Acad. Geol., Coal Meas. [Sig. tufted.]
- pertenuis, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. very slender.]
- semicircularis, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. half-circular.]
- stevensoni, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Ety. proper name.]
- CYRTACANTHUS, Newberry, 1873, Ohio Pal., vol. 1. [Ety. *kurtos*, curved; *akantha*, a spine.]
- †dentatus, Newberry, 1873, Ohio Pal., vol. 1, Corniferous Gr. [Sig. toothed.]

- CYMATODUS**, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4. [Ety. *cymatos*, wavy; *odous*, tooth.]  
 oblongus, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Up. Coal Meas. [Sig. oblong.]
- DACTYLODUS**, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2. [Ety. *daktylos*, a finger; *odous*, a tooth.]  
 concavus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. concave.]  
 excavatus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. hollowed out.]  
 inflexus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. bent, curved.]  
 lobatus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, St. Louis Gr. [Sig. lobate.]  
 minimus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. very small.]  
 princeps, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, St. Louis Gr. [Sig. chief.]
- DELTODUS**, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2. [Ety. *delta*, triangular; *odous*, tooth.]  
 alatus, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Keokuk Gr. [Sig. winged.]  
 angularis, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. angular.]  
 angustus, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Chester Gr. [Sig. narrow.]  
 cingulatus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. encircled with lines.]  
 complanatus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Burlington Gr. [Sig. smoothed.]  
 fasciatus, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Keokuk Gr. [Sig. banded, girded.]  
 grandis, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. grand.]  
 littoni, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Low. Carb. [Ety. proper name.]  
 rhomboideus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, St. Louis Gr. [Sig. lozenge or diamond-shaped.]  
 spatulatus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Burlington Gr. [Sig. spatulate, blade-shaped.]  
 stellatus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. starred.]  
 undulatus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. undulated, waved.]
- DESMIODUS**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *desmos*, a ligament; *odous*, tooth.] This name was applied to a genus of bats, in 1826, by Prinz, Neu. Wied. in Beitrage zur Naturg. Brasiliens.
- costelliferus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. bearing faint ribs.]  
 flabellum, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. a little fan.]  
 ligoniformis, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. like a mattock.]  
 minusculus, Newberry & Worthen, 1866, (Orodus minusculus) Geo. Rep. Ill., vol. 2, Keokuk Gr. [Sig. rather small.]  
 tumidus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. swollen out.]
- DINICHTHYS**, Newberry, 1873, Ohio Pal., vol. 1. [Ety. *deinos*, terrible; *ichthys*, a fish.]  
 hertzeri, Newberry, 1873, Ohio Pal., vol. 1, Corniferous Gr. [Ety. proper name.]  
 terrelli, Newberry, 1873-'75, Ohio Pal., vol. 1 and 2, Corniferous Gr. [Ety. proper name.]
- DIPLODUS**, Agassiz, 1843, Recherches sur les Poissons Fossiles. [Ety. *diploos*, double; *odous*, a tooth.] This name was used by Rafinesque for a genus of *Sparidae* in 1810, Indice d'Litologia Siciliana.  
 acinaces, Dawson, 1860, Acad. Geol., Coal Meas. [Sig. a short saber.]  
 compressus, Newberry, 1857, Proc. Acad. Nat. Sci. Phil., vol. 8, Coal Meas. [Sig. compressed.]  
*uplicatus*, see *Thrinacodus duplicatus*.  
 gracilis, Newberry, 1857, Proc. Acad. Nat. Sci. Phil., vol. 8, Coal Meas. [Sig. slender.]  
*incurvus*, see *Thrinacodus incurvus*.  
 latus, Newberry, 1857, Proc. Acad. Nat. Sci. Phil., vol. 8, Coal Meas. [Sig. broad.]  
 penetrans, Dawson, 1860, Acad. Geol., Coal Meas. [Sig. piercing, penetrating.]
- DIPTERUS**, Sedgwick & Murchison, 1828, Geo. Trans., 2d series, vol. 3. [Ety. *dipteros*, two winged.] *Diptera* is an order of insects established by Linnæus.
- sherwoodi, Newberry, 1875, Ohio Pal., vol. 2, Catskill Gr. [Ety. proper name.]
- DREPANACANTHUS**, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2. [Ety. *drepane*, a sickle; *akantha*, a spine.]  
*anceps*, see *Xystracanthus anceps*.  
 gemmatus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. budded or having knots.]  
 reversus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. reversed.]  
*stellatus*, see *Batacanthus stellatus*.



- EDESTES*, Leidy, 1856, Jour. Acad. Nat. Sci., 2nd series, vol. 3. [Ety. *edestes*, a devourer.]
- heinrichsi*, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Ety. proper name.]
- minor*, Newberry, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. less.]
- vorax*, Leidy, 1856, Jour. Acad. Nat. Sci. Phil., vol. 3, 2d series, Coal Meas. [Sig. ravenous, voracious.]
- Elonichthys peltigerus*, see *Palæoniscus peltigerus*.
- ERISMACANTHUS*, McCoy, 1848, Ann. & Mag. Nat. Hist., 2d series, vol. 2. [Ety. *ereisma*, a prop or stay; *akantha*, a spine.]
- maccoyanus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Ety. proper name.]
- EURYLEPIS*, Newberry, 1856, Proc. Acad. Nat. Sci. Phil. [Ety. *eury*s, broad; *lepis*, scale.]
- corrugata*, Newberry, 1856, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. corrugated.]
- granulata*, Newberry, 1856, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. granular.]
- insculpta*, Newberry, 1856, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. carved, engraved.]
- lineata*, Newberry, 1856, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. lined.]
- minima*, Newberry, 1873, Ohio Pal., vol. 1, Coal Meas. [Sig. very small.]
- ornatissima*, Newberry, 1856, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. highly ornamented.]
- ovoidea*, Newberry, 1856, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. egg-shaped.]
- striolata*, Newberry, 1873, Ohio Pal., vol. 1, Coal Meas. [Sig. very minutely striated.]
- tuberculata*, Newberry, 1856, Proc. Acad. Nat. Sci., Coal Meas. [Sig. tuberculated.]
- FISSODUS*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *fissus*, split; *odous*, tooth.]
- bifidus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. divided into two parts.]
- tricuspidatus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. three-pointed.]
- GAMPSACANTHUS*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *gampsos*, curved; *akantha*, a spine.]
- (?) *latus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. wide.]
- squamosus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. scaly.]
- typus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Ety. the type of the genus.]
- GEISACANTHUS*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *geison*, a border; *akantha*, a spine.]
- bullatus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. bossed, studded.]
- stellatus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. starred.]
- GLYMMATACANTHUS*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *glymmatos*, engraved; *akantha*, a spine.]
- irishi*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Ety. proper name.]
- GYRACANTHUS*, Agassiz, 1837, Recherches sur les Poissons Fossiles. [Ety. *gyros*, a circle; *akantha*, a spine.]
- alleni*, Newberry, 1873, Ohio Pal., vol. 1, Cuyahoga shale. [Ety. proper name.]
- compressus*, Newberry, 1873, Ohio Pal., vol. 1, Cuyahoga shale. [Sig. compressed.]
- duplicatus*, Dawson, 1868, Acad. Geol., Coal Meas. [Sig. doubled.]
- magnificus*, Dawson, 1868, Acad. Geol., Low. Carb. [Sig. magnificent, splendid.]
- HARPACODUS*, Agassiz, 1869, Catal. Foss. Fish, Collection of Earl of Enniskillen. [Ety. *harpe*, a hook; *odous*, a tooth.]
- compactus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. compact.]
- occidentalis*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. western.]
- HELIODUS*, Newberry, 1875, Ohio Pal., vol. 2. [Ety. *helios*, the sun; *odous*, a tooth.]
- lesleyi*, Newberry, 1875, Ohio Pal., vol. 2, Chemung Gr. [Ety. proper name.]
- HELODUS*, Agassiz, 1838, Recherches sur les Poissons Fossiles. [Ety. *helos*, a nail or rudder; *odous*, a tooth.]
- angulatus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. angular.]
- biformis*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Kinderhook Gr. [Sig. double-formed.]
- carbonarius*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. pertaining to coal.]
- compressus*, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Burlington Gr. [Sig. compressed.]
- compressus*, see *Hybocladodus compressus*.
- coniculus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Burlington Gr. [Sig. a little cone.]
- consolidatus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. consolidated.]

- crenulatus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. crenulated.]  
 denshumani, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Ety. proper name.]  
 denticulatus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. denticulated.]  
 elytra, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Ety. *elytron*, the wing covering as the *elytra* of the beetle.]  
 gibbosus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. gibbous.]  
 limax, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Burlington Gr. [Sig. a slug, dew-snail.]  
 nobilis, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. noble, excellent.]  
 placenta, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Kinderhook Gr. [Sig. a cake.]  
 politus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. smooth.]  
 rugosus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. wrinkled.]  
 sulcatus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. furrowed.]  
 undulatus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. waved.]  
 HOLOPTYCHIUS, Agassiz, 1843, Recherches sur les Poissons Fossiles. [Ety. *holos*, entire; *ptyche*, a wrinkle.]  
 americanus, Leidy, 1856, Jour. Acad. Nat. Sci., 2nd series, vol. 3, Catskill Gr. [Ety. proper name.]  
 nobilissimus, Agassiz, as identified by Hall, 1843, Geo. Rep. 4th Dist. N. Y., is described as *H. americanus*.  
 taylori, Hall, 1843, (Sauripteris taylori) Geo. Rep. 4th Dist. N. Y., Catskill Gr. [Ety. proper name.]  
 Homacanthus, Agassiz, 1845, Mon. Pois. Foss. Syst., Devonian.  
*gibbosus*, see Amacanthus gibbosus.  
*rectus*, see Marracanthus rectus.  
 HYBOCLADODUS, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *hybos*, a hump; *Cladodus*, a genus of fossil fish.]  
 compressus, Newberry & Worthen, 1866, (Helodus compressus) Geo. Sur. Ill., vol. 2, Burlington Gr. [Sig. compressed.]  
 intermedius, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. intermediate.]  
 nitidus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. neat, pretty.]  
 plicatilis, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. in small folds.]  
 tenuicostatus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. finely lined.]  
 LAMBODUS, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *Lambda*, a Greek letter; *odous*, a tooth.]  
 calceolus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. a sandal, a slipper.]  
 calceolus var. robustus, St. John & Worthen, 1866, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. robust.]  
 costatus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. ribbed.]  
 hamulus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. a small hook.]  
 reflexus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. turned back.]  
 transversus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. crosswise.]  
 LECRACANTHUS, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *lekroi*, the antlers of a stag; *akantha*, a spine.]  
 unguiculus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. furnished with claw-like processes.]  
 LEIODUS, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *leios*, smooth; *odous*, tooth.]  
 calcaratus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. spurred, spur-shaped.]  
 calcaratus var. grossipunctatus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. thick-punctured.]  
 Leptacanthus, Agassiz, 1837, Poiss. Foss., vol. 3, [Ety. *leptos*, slender; *akantha*, spine.]  
*occidentalis*, see Acondylacanthus occidentalis.  
 LEPTOPHRACTUS, Cope, 1873, Proc. Acad. Nat. Sci. Phil. [Ety. *leptos*, thin; *phraktos*, walled.]  
 obsoletus, Cope, 1873, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. obsolete.]  
 LIOGNATHUS, Newberry, 1873, Ohio Pal., vol. 1. [Ety. *lis*, smooth; *gnathos*, the jaw.]  
 spatulatus, Newberry, 1873, Ohio Pal., vol. 1, Corniferous Gr. [Sig. spatulate, blade-shaped.]  
 LISGODUS, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *lisgos*, a spade; *odous*, a tooth.]  
 curtus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. short.]  
 selluliformis, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. like a little seat or stool.]  
 serratus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. saw-edged.]

- LISTRACANTHUS**, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4. [Ety. *listron*, a shovel; *akantha*, a spine.]
- hildrethi*, Newberry, 1875, Ohio Pal., vol. 2, Coal Meas. [Ety. proper name.]
- hystrix*, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Burlington Gr. [Sig. covered or beset with spines.]
- Lophodus**, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4. This name was pre-occupied by Romanowsky in 1864.
- variabilis*, see *Agassizodus variabilis*.
- MACHÆRACANTHUS**, Newberry, 1853, Annals of Science, vol. 1, and 1857, Bull. Nat. Inst. [Ety. *machaira*, a sabre; *akantha*, a spine.]
- major*, Newberry, 1857, Bull. Nat. Inst., Corniferous Gr. [Sig. greater.]
- peracutus*, Newberry, 1857, Bull. Nat. Inst., Corniferous Gr. [Sig. very sharp-pointed.]
- sulcatus*, Newberry, 1857, Bull. Nat. Inst., Corniferous Gr. [Sig. furrowed.]
- MACROPETALICHTHYS**, Norwood & Owen, 1846, Am. Jour. Sci., 2d ser., vol. 1. [Ety. *makros*, large; *petalos*, expanded or spread out; *ichthys*, a fish.]
- manni*, Newberry, 1853, (Agassichthys *manni*) Annals of Science, vol. 1, and 1857, Bull. Nat. Inst., Corniferous Gr. [Ety. proper name.]
- raphaidolabis*, Norwood & Owen, 1846, Am. Jour. Sci., 2d ser., vol. 1, Up. Held. Gr. [Ety. *raphis*, a needle; *eidos*, form; *labis*, forceps.]
- sullivanti*, Newberry, 1857, (Agassichthys *sullivanti*) Bull. Nat. Inst., Corniferous Gr. [Ety. proper name.]
- MARRACANTHUS**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *marron*, a spade; *akantha*, a spine.]
- rectus*, Newberry & Worthen, 1866, (Homacanthus (?) *rectus*) Geo. Sur. Ill., vol. 2, St. Louis Gr. [Sig. straight.]
- MÆCOLEPIS**, Newberry, 1857, Proc. Acad. Nat. Sci., vol. 8. [Ety. *mekos*, large; *lepis*, a scale.]
- corrugata*, Newberry, 1857, Proc. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. wrinkled.]
- granulata*, Newberry, 1857, Proc. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. granulated.]
- insculpta*, Newberry, 1857, Proc. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. engraved.]
- lineata*, Newberry, 1857, Proc. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. lined.]
- ornatissima*, Newberry, 1857, Proc. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. highly ornamented.]
- ovoidea*, Newberry, 1857, Proc. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. ovoidal.]
- serrata*, Newberry, 1857, Proc. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. serrated.]
- tuberculata*, Newberry, 1857, Proc. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. tuberculated.]
- MESODMODUS**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *mesodme*, something between; *odous*, a tooth.]
- explanatus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. spread out.]
- exculptus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. deeply sculptured.]
- ornatus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. ornamented.]
- Onchus*, Agassiz, 1837, Recherches sur les Poissons Fossiles. [Ety. *onchos*, bent or hooked like a talon or arrow-barb.]
- deweyi*, see *Ceratiocaris deweyi*.
- ONYCHODUS**, Newberry, 1853, Annals of Science, vol. 1, and 1857, Bull. Nat. Inst. [Ety. *onyx*, a claw; *odous*, tooth.]
- hopkinsi*, Newberry, 1853, Annals of Science, vol. 1, and 1857, Bull. Nat. Inst., Corniferous Gr. [Ety. proper name.]
- sigmoides*, Newberry, 1853, Annals of Science, vol. 1, and 1857, Bull. Nat. Inst., Corniferous Gr. [Sig. like the letter *Sigma*.]
- ORACANTHUS**, Agassiz, 1837, Recherches sur les Poissons Fossiles. [Ety. *oraios*, beautiful; *akantha*, spine.]
- abbreviatus*, Newberry, 1853, Annals of Science, vol. 1, Corniferous Gr. [Sig. abbreviated.]
- consimilis*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. wholly similar.]
- (?) *obliquus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. oblique.]
- pnigeus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. This species is made the type of the genus *Pnigeacanthus*, see *P. deltoides*.
- vetustus*, Leidy, 1856, Jour. Acad. Nat. Sci. Phil., 2d ser., vol. 3, Low. Carb. [Sig. ancient.]
- fragilis*, Newberry, 1853, Annals of Science, vol. 1, Corniferous Gr. [Sig. frail, easily broken.]
- granulatus*, Newberry, 1853, Annals of Science, vol. 1, Corniferous Gr. [Sig. granulated.]
- multiseriatus*, Newberry, 1853, Annals of Sci., vol. 1, Corniferous Gr. [Sig. in many series.]
- ORODUS**, Agassiz, 1838, Recherches sur les Poissons Fossiles. [Ety. *oraios*, beautiful; *odous*, tooth.]
- alleni*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Ety. proper name.]
- carinatus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. keeled.]
- corrugatus*, see *Agassizodus corrugatus*.

- dædaleus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Ety. mythological name.]
- decussatus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. arranged in pairs that alternately cross each other.]
- elegantulus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Burlington Gr. [Sig. very elegant.]
- fastigiatus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. pointed.]
- major*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. large.]
- mammillaris*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. pap-shaped.]
- minusculus*, see *Desmodius minusculus*.
- minutus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. very small.]
- multicarinatus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Kinderhook Gr. [Sig. many-keeled.]
- neglectus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. overlooked.]
- ornatus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. ornamented.]
- parallelus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. parallel.]
- parvulus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. very small.]
- plicatus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, St. Louis Gr. [Sig. folded.]
- tuberculatus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Burlington Gr. [Sig. tuberculated.]
- turgidus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. turgid, swollen out.]
- variabilis*, Newberry, 1875, Ohio Pal., vol. 2, Waverly Gr. [Sig. variable.]
- varicostatus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. variably ribbed.]
- whitell*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Ety. proper name.]
- ORTHACANTHUS**, Agassiz, 1843, Poiss. Foss., vol. 3. [Ety. *orthos*, straight; *akantha*, spine.]
- arcuatus*, Newberry, 1857, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. bent, bow-shaped.]
- gracilis*, Newberry, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. slender.]
- PALÆONISCUS**, Agassiz, 1833, Recherches sur les Poissons Fossiles. [Ety. *palaio*s, ancient; *oniscus*, a wood louse.]
- alberti*, Jackson, 1851, Rep. on the Albert Coal Mine, New Brunswick, Coal Meas. [Ety. proper name.]
- brainardi*, Thomas, 1853, Bost. Soc. Nat. Hist., vol. 4, Ohio Pal., vol. 1, Berea grit. [Ety. proper name.]
- browni*, Jackson, 1851, Rep. on Albert Coal Mine, Coal Meas. [Ety. proper name.]
- cairnesi*, Jackson, 1851, Rep. on Albert Coal Mine, New Brunswick, Coal Meas. [Ety. proper name.]
- gracilis*, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. slender.]
- leidyanus*, Lea, 1852, Jour. Acad. Nat. Sci., 2d series, vol. 2, Coal Meas. [Ety. proper name.]
- peltigerus*, Newberry, 1857, (Elonichthys *peltigerus*) Proc. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. bearing a small shield.]
- scutigerus*, Newberry, 1857, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. shield-bearing.]
- PELTODUS**, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4. [Ety. *pelle*, a half-moon shield; *odous*, a tooth.]
- plicomphalus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. folded in the middle.]
- quadratus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. square-shaped.]
- transversus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Sig. crosswise.]
- unguiformis*, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. claw-shaped.]
- PEPLORHINA**, Cope, 1873, Proc. Acad. Nat. Sci. Phil. [Ety. *peplos*, a robe; *Rhine*, a kind of dog-fish.]
- anthracina*, Cope, 1873, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Ety. *anthrax*, coal.] Prof. Newberry says this species is an amphibian and not a fish.
- PERIPLECTRODUS**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *peri*, near by; *Plectrodus*, a genus of fish.]
- compressus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. compressed.]
- expansus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. expanded.]
- warreni*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Ety. proper name.]
- PETALODUS**, Owen, 1840, Odontography. [Ety. *petalos*, spread out; *odous*, a tooth.]
- alleganiensis*, Leidy, 1856, Jour. Acad. Nat. Sci., 2nd series, vol. 3, Coal Meas. [Ety. proper name.]
- curtus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. short.]
- destructor*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. a destroyer.]

- hybridus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. hybrid; intermediate between two species.]
- linguifer, Newberry & Worthen, 1856, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. tongue-bearing.]
- parvulus, Newberry & Worthen, Carboniferous. [Sig. very small.]
- politus, Newberry & Worthen, Carboniferous. [Sig. smooth.]
- sulcatus, Newberry & Worthen, Carboniferous. [Sig. furrowed.]
- proximus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Sig. approaching, near to.]
- PETALORHYNCHUS, Agassiz, 1855, in British Pal. Rocks. [Ety. *petalos*, spread out; *rhynchos*, a beak.]
- distortus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. distorted, twisted.]
- pseudosagittatus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. false *sagittatus*, a species of *Petalorhynchus*.]
- spatulus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. spatulate, blade-shaped.]
- striatus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Burlington Gr. [Sig. striated.]
- PETRODUS, McCoy, 1848, Ann. & Mag. Nat. Hist., 2d series, vol. 2. [Ety. *petros*, a rock; *odous*, a tooth.]
- acutus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. sharp-pointed.]
- occidentalis, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. western.]
- pustulosus, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Burlington Gr. [Sig. covered with pustules.]
- PHÆBODUS, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. mythological name; *odous*, a tooth.]
- sophiæ, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Devonian. [Ety. proper name.]
- PHYSONEMUS, Agassiz, 1843, Recherches sur les Poissons Fossiles. [Ety. *physis*, a bladder; *nema*, a thread.]
- altonensis, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Ety. proper name.]
- carinatus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. keeled.]
- chesterensis, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Ety. proper name.]
- depressus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. depressed.]
- gigas, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Burlington Gr. [Sig. large.]
- parvulus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. very small.]
- proclivis, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. sloping, going downward.]
- PLATYODUS, Newberry, 1875, Ohio Pal., vol. 2. [Ety. *platys*, broad; *odous*, a tooth.]
- lineatus, Newberry, 1875, Ohio Pal., vol. 2, Waverly Gr. [Sig. lined.]
- PLATYSOMUS, Agassiz, 1833, Recherches sur les Poissons Fossiles. [Ety. *platys*, broad; *soma*, body.]
- circularis, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. circular.]
- PLEURACANTHUS, Agassiz, 1837, Poiss. Foss., vol. 3. [Ety. *pleura*, side; *akantha*, spine.]
- arcuatus, Newberry, 1857, Proc. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. bent.]
- biserialis, Newberry, 1857, Proc. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. having two series.]
- dilatatus, Newberry, 1857, Proc. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. dilated.]
- PNIGEACANTHUS, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. from the specific name in *Oracanthus pnigeus*; *akantha*, a spine.]
- deltoides, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. like the Greek letter *Delta*.] But why should this species not be *Pnigeacanthus pnigeus*?
- PECILODUS, Agassiz, 1843, Recherches Poiss. Foss., vol. 3. [Ety. *poikilos*, variegated; *odous*, tooth.]
- convolutus, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Keokuk Gr. [Sig. rolled together.]
- ornatus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. ornamented.]
- rugosus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. wrinkled.]
- POLYRHIZODUS, McCoy, 1848, Ann. & Mag. Nat. Hist., 2d series, vol. 2. [Ety. *polys*, many; *rhiza*, root; *odous*, tooth.]
- amplus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. full-sized.]
- carbonarius, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Sig. pertaining to coal.]
- dentatus, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. toothed.]
- littoni, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, St. Louis Gr. [Ety. proper name.]
- modestus, Newberry, 1875, Ohio Pal., vol. 2, Cleveland shale. [Sig. moderate.]
- nanus, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. dwarfish.]

- piasaensis*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Ety. proper name.]
- ponticulus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. a little bridge.]
- porosus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Burlington Gr. [Sig. full of pores, porous.]
- truncatus*, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Burlington Gr. [Sig. truncated, cut off.]
- williamsi*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Ety. proper name.]
- PRISTICLADODUS**, McCoy, 1855, British Pal. Rocks. [Ety. from the two genera *Pristis* and *Cladodus*.]
- springeri*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Ety. proper name.]
- PRISTODUS**, Agassiz. [Ety. *pristis*, a saw; *odous*, a tooth.]
- acuminatus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. sharp-pointed.]
- PSAMMODUS**, Agassiz, 1838, Recherches sur les Poissons Fossiles. [Ety. *psammos*, sand; *odous*, tooth.]
- angularis*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. angular.]
- antiquus*, Newberry, 1853, Annals of Science, vol. 1, and 1857, Bull. Nat. Inst., Corniferous Gr. [Sig. ancient.]
- porosus*, Agassiz, 1838, Recherch. Poiss. Foss., St. Louis Gr. [Sig. full of pores.]
- reticulatus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Chester Gr. [Sig. reticulated, net work.]
- rhomboides*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. like a rhomb, lozenge-shaped.]
- rugosus*, Agassiz, 1838, Recherch. Poiss. Foss., St. Louis Gr. [Sig. wrinkled.]
- semicylindricus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. half cylindrical.]
- PSEPHODUS**, Agassiz. [Ety. *psephos*, a pebble; *odous*, a tooth.]
- reticulatus*, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. reticulated, like net work.]
- PTERICHTHYS**, Miller, 1840, in British Rep. [Ety. *pteron*, a fin; *ichthys*, a fish.]
- norwoodensis*, Owen, 1846, Am. Jour. Sci., 2nd series, vol. 1, Up. Held. Gr. [Ety. proper name.]
- PTYCTODUS**, Pander, Über die Ctenodipteren des Devonischen Systems. [Ety. *ptyktos*, folded; *odous*, a tooth.]
- calceolus*, Newberry & Worthen, 1866, (Rinodus calceolus) Geo. Sur. Ill., vol. 2, Ham. Gr. [Sig. a sandal or slipper.]
- PYGOPTERUS**, Agassiz, 1833, Poiss. Foss., vol. 2. [Ety. *pyge*, rump; *pteron*, a fin.]
- scutellatus*, Newberry, 1857, Proc. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. shielded.]
- RHIZODUS**, Owen, 1840, Odontography. [Ety. *rhiza*, a root; *odous*, a tooth.]
- angustus*, Newberry, 1857, Proc. Acad. Nat. Sci. Phil., vol. 8, Coal Meas. [Sig. narrow.]
- hardingi*, Dawson, 1868, Acad. Geol., Carboniferous. [Ety. proper name.]
- incurvus*, Newberry, 1857, Proc. Acad. Nat. Sci., vol. 8, Coal Meas. [Sig. incurved.]
- lancifer*, Newberry, 1857, Proc. Acad. Nat. Sci. Phil., vol. 8, Coal Meas. [Sig. bearing a lance.]
- occidentalis*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. western.]
- quadratus*, Newberry, 1873, Ohio Pal., vol. 1, Coal Meas. [Sig. square-shaped.]
- reticulatus*, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, Coal Meas. [Sig. reticulated, net-work.]
- RHYNCHODUS**, Newberry, 1873, Ohio Pal., vol. 1. [Ety. *rhynchos*, a beak; *odous*, a tooth.]
- crassus*, Newberry, 1873, Ohio Pal., vol. 1, Corniferous Gr. [Sig. thick.]
- frangens*, Newberry, 1873, Ohio Pal., vol. 1, Corniferous Gr. [Sig. broken.]
- secans*, Newberry, 1873, Ohio Pal., vol. 1, Corniferous Gr. [Sig. divided up.]
- Rinodus*, syn. for *Ptyctodus*.
- calceolus*, see *Ptyctodus calceolus*.
- SANDALODUS**, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2. [Ety. *sandalon*, a sandal; *odous*, a tooth.]
- angustus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. narrow.]
- carbonarius*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. pertaining to coal.]
- crassus*, Newberry & Worthen, 1870, Geo. Sur. Ill., vol. 4, St. Louis Gr. [Sig. thick.]
- grandis*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. large.]
- laevissimus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. very smooth.]
- parvulus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, St. Louis Gr. [Sig. very small.]
- spatulatus*, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, St. Louis Gr. [Sig. spatulate, blade-shaped.]
- Sauripteris*, Hall, 1843, Geo. Rep. 4th Dist. N. Y. [Ety. *sauros*, a lizard; *pteron*, a wing.]
- taylori*, see *Holoptychius taylori*.



- STEMMATODUS**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *stematod*, a wreath; *odous*, a tooth.]
- bicristatus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. double-peaked.]
- bifurcatus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. forked.]
- cheiriformis**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. like a hand.]
- compactus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. compact.]
- keokuk**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Ety. proper name.]
- simplex**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. simple.]
- symmetricus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. symmetrical.]
- STENACANTHUS**, Leidy, 1857, Proc. Acad. Nat. Sci., vol. 8. [Ety. *stenos*, narrow; *akantha*, a spine.]
- nitidus**, Leidy, 1857, Proc. Acad. Nat. Sci., vol. 8, Devonian. [Sig. neat, smooth.]
- TANAODUS**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *tanaos*, long; *odous*, a tooth.]
- angularis**, Newberry & Worthen, 1866, (Chomatodus angularis) Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. angulated.]
- bellicinctus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. beautifully banded.]
- depressus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. depressed.]
- gracillimus**, Newberry & Worthen, 1866, (Chomatodus gracillimus) Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. very slender.]
- grossiplicatus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. thick-folded.]
- multiplicatus**, Newberry & Worthen, 1866, (Chomatodus multiplicatus) Geo. Sur. Ill., vol. 2, Burlington Gr. [Sig. many folded.]
- obscurus**, Leidy, 1856, (Chomatodus obscurus) Trans. Am. Phil. Soc., vol. 11, Keokuk Gr. [Sig. obscure.]
- polymorphus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. many formed.]
- praenuntius**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. forboding.]
- pumilus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. a dwarf.]
- sculptus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. engraved, sculptured.]
- sublunatus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. [Sig. somewhat lunate.]
- THRINACODUS**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *thrinakos*, three-pronged; *odous*, a tooth.]
- nanus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Kinderhook Gr. [Sig. dwarfish.]
- duplicatus**, Newberry & Worthen, 1866, (Diplodus duplicatus) Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. folded in two.]
- incurvus**, Newberry & Worthen, 1866, (Diplodus incurvus) Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. incurved.]
- TRIGONODUS**, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2. [Ety. *trigonos*, three-cornered; *odous*, tooth.]
- major**, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Burlington Gr. [Sig. large.]
- minor**, Newberry & Worthen, 1866, Geo. Sur. Ill., vol. 2, Keokuk Gr. [Sig. small.]
- VENUSTODUS**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6. [Ety. *venustus*, beautiful; *odous*, tooth.]
- argutus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Chester Gr. [Sig. pretty.]
- leidyi**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, St. Louis Gr. This name is a syn. for *V. venustus*.
- robustus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. robust.]
- tenuicristatus**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Keokuk Gr. [Sig. slender-peaked.]
- variabilis**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Burlington Gr. [Sig. variable.]
- venustus**, Leidy, 1856, (Chomatodus venustus) Trans. Am. Phil. Soc. Phil., vol. 11, St. Louis Gr. [Sig. beautiful.]
- XYSTRACANTHUS**, Leidy, 1859, Proc. Acad. Nat. Sci. Phil. [Ety. *xystra*, a tool for scraping; *akantha*, a spine.]
- acinaciformis**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Sig. scimitar-shaped.]
- anceps**, Newberry & Worthen, 1866, (Drepanacanthus anceps) Geo. Sur. Ill., vol. 2, Coal Meas. [Sig. doubtful.]
- arcuatus**, Leidy, 1859, Proc. Acad. Nat. Sci. Phil., Up. Coal Meas. [Sig. bent, bow-shaped.]
- mirabilis**, St. John & Worthen, 1875, Geo. Sur. Ill., vol. 6, Coal Meas. [Sig. wonderful.]
- XYSTRODUS**, Agassiz. [Ety. *xystra*, an instrument for scraping; *odous*, tooth.]
- occidentalis**, St. John, Coal Meas. [Sig. western.]



# CLASS REPTILIA.

## SUB-CLASS BATRACHIA.

FAMILY COLOSTEIDÆ.—Amphibamus, Colosteus, Sauropleura.

FAMILY MOLGOPHIDÆ.—Molgophis, Pleuroptyx.

FAMILY PHLEGETHONTIIDÆ.—Phlegethontia.

FAMILY PTYONIIDÆ.—Hyphasma, Oestocephalus, Ptyonius.

FAMILY TUDITANIDÆ.—Brachydectes, Ceraterpeton, Dendrerpeton, Eurythorax, Hylerpeton, Hylonomus, Leptophractus, Pelion, Tuditanus.

ORDER PROTEIDA.—Cocytinus, Thyrsidium.

INCERTÆ SEDIS.—Baphetes, Cheirotherium, Clepsysaurus, Collettosaurus, Eosaurus, Ornithichnites, Sauropus, Spheropezium, Thenaropus.

AMPHIBAMUS, Cope, 1865, Proc. Acad. Nat. Sci. Phil. [Ety. *amphi*, both; *bama*, a step; from its two modes of progressing—swimming and walking.]

grandiceps, Cope, 1865, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. big-headed.]

BAPHETES, Owen, 1853, Jour. Geo. Soc. London, vol. 9. [Ety. *bapto*, I dip or dive—a diving animal.]

minor, Dawson, 1870, Can. Nat. & Geol., Coal Meas. [Sig. less.]

planiceps, Owen, 1853, Jour. Geo. Soc. London, vol. 9, Coal Meas. [Ety. flat-headed.]

BRACHYDECTES, Cope, 1868, Proc. Acad. Nat. Sci. Phil. [Ety. *brachys*, short; *dektes*, a biter.]

newberryi, Cope, 1868, Proc. Acad. Nat. Sci., Coal Meas. [Ety. proper name.]

CERATERPETON, Huxley. [Ety. *keras*, horn; *erpeton*, reptile.]

punctolineatum, Cope, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. puncture-lined.]

tenuicorne, Cope, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. slender-horned.]

CHEIROTHERIUM, Kaup, 1835, in Leonhard und Bronn, Neues Jahrbuch für Mineralogie. [Ety. *cheir*, the hand; *therion*, beast.]

reiteri, Moore, 1863, Am. Jour. Sci. & Arts, 3rd ser., vol. 5, Coal Meas. [Ety. proper name.]

CLEPSYSAURUS, Lea, 1852, Jour. Acad. Nat. Sci., vol. 2. [Ety. *klepsydra*, a sand-glass; *saurus*, a lizard; from the compression laterally of the vertebrae towards the center.]

pennsylvanicus, Lea, 1852, Jour. Acad. Nat. Sci., vol. 2, Coal Meas. [Ety. proper name.]

COCYTINUS, Cope, 1871, Proc. Am. Phil. Soc. [Ety. *kokytos*, mythological name.]

gyrinoides, Cope, 1874, Trans. Am. Phil. Soc., Coal Meas. [Sig. like a tadpole.]

COLLETTOSAURUS, Cox, 1873, Geo. Sur. Ind. [Ety. proper name; *saurus*, a lizard.]

indianensis, Cox, 1873, Geo. Sur. Ind., Coal Meas. [Ety. proper name.]

COLOSTEUS, Cope, 1869, Trans. Am. Phil. Soc. [Ety. *kolos*, short; *osteon*, a bone.]

*crassiculatus*, syn. for *C. scutellatus*.

foveatus, 1869, Trans. Am. Phil. Soc., Coal Meas. [Sig. pitted.]

*marshi*, see *Ptyonius marshi*.

pauciradiatus, Cope, 1874, Trans. Am. Phil. Soc., Coal Meas. [Sig. few-lined.]

scutellatus, Newberry, 1856, (*Pygopterus scutellatus*) Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. having a shield.]

DENDRERPETON, Owen, 1853, Quar. Jour. Geo. Soc., vol. 9. [Ety. *dendron*, a tree; *erpeton*, a lizard; from the peculiar circumstances under which the fossil reptile was found.]

- acadianum, Owen, 1853, Quar. Jour. Geo. Soc., vol. 9, Coal Meas. [Ety. from *Acadia*, the ancient name of Nova Scotia.]
- oweni, Dawson, 1863, Quar. Jour. Geo. Soc., vol. 19, Coal Meas. [Ety. proper name.]
- EOSAURUS, Marsh, 1862, Can. Nat. & Geo., vol. 7. [Ety. *eos*, the dawn; *sauros*, a lizard.]
- acadianus, Marsh, 1862, Can. Nat. & Geo., vol. 7, Coal Meas. [Ety. proper name.]
- EURYTHORAX, Cope, 1875, Ohio Pal., vol. 2. [Ety. *euryx*, broad; *thorax*, the breast.]
- sublævis, Cope, 1871, Proc. Am. Phil. Soc., Coal Meas. [Sig. somewhat smooth.]
- HYLERPETON, Owen, 1862, Quar. Jour. Geo. Soc., vol. 18. [Ety. *hyle*, wood; *erpeton*, reptile.]
- curtidentatum, Dawson, 1876, Am. Jour. Sci. & Arts, vol. 12, Coal Meas. [Sig. short-toothed.]
- dawsoni, Owen, 1862, Quar. Jour. Geo. Soc., vol. 18, Coal Meas. [Ety. proper name.]
- longidentatum, Dawson, 1876, Am. Jour. Sci. & Arts, vol. 12, Coal Meas. [Sig. long-toothed.]
- HYLONOMUS, Dawson, 1860, Quar. Jour. Geo. Soc., vol. 16. [Ety. *hyle*, wood; *nomos*, an abode; forest dweller.]
- acidentatus, Dawson, 1860, Quar. Jour. Geo. Soc., vol. 16, Coal Meas. [Sig. needle-toothed, sharp-toothed.]
- lyelli, Dawson, 1860, Quar. Jour. Geo. Soc., vol. 16, Coal Meas. [Ety. proper name.]
- hymani, Dawson, 1860, Quar. Jour. Geo. Soc., vol. 16, Coal Meas. [Ety. proper name.]
- HYPHASMA, Cope, 1875, Proc. Acad. Nat. Sci. Phil. [Ety. *hyphasma*, a web.]
- lævis, Cope, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. smooth.]
- LEPTOPHRACTUS, Cope, 1873, Proc. Acad. Nat. Sci. Phil. [Ety. *leptos*, stripped; *phraktos*, defence.]
- obsoletus, Cope, 1873, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. obsolete.]
- MOLGOPHIS, Cope, 1868, Proc. Acad. Nat. Sci. [Ety. *molgos*, a skin; *ophis*, a serpent.]
- brevicostatus, Cope, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. short-ribbed.]
- macrurus, Cope, 1868, Proc. Acad. Nat. Sci., Coal Meas. [Sig. long-tailed.]
- wheatleyi, Cope, 1874, Trans. Am. Phil. Soc., Coal Meas. [Ety. proper name.]
- OESTOCEPHALUS, Cope, 1868, Proc. Acad. Nat. Sci. Phil. [Ety. *oistos*, an *kephale*, the head.]
- amphiuminus, Cope, 1868, Proc. Acad. Nat. Sci., Coal Meas. [Ety. from resemblance to *Amphiuma*.]
- pectinatus, see *Ptyonius pectinatus*.
- rectidens, Cope, 1874, Trans. Am. Phil. Soc., Coal Meas. [Sig. straight-toothed.]
- remex, Cope, 1868, (*Sauroplesura remex*) Proc. Acad. Nat. Sci., Coal Meas. [Sig. an oarsman, a rower.]
- vinchellanus*, see *Ptyonius vinchellanus*.
- ORNITHICHNITES, Hitchcock, 1832, Am. Jour. Sci. & Arts. [Ety. *ornithos*, a bird; *ichnos*, a foot step.]
- culbertsoni, King, 1845, Am. Jour. Sci., vol. 48, Coal Meas. [Ety. proper name.]
- gallinuloides, King, 1845, Am. Jour. Sci., vol. 48, Coal Meas. [Sig. similar to a pullet.]
- PELION, Wyman, 1868, Proc. Acad. Nat. Sci. Phil. [Ety. proper name.]
- lyelli, Wyman, 1858, (*Raniceps lyelli*) Am. Jour. Sci. & Arts, Coal Meas. [Ety. proper name.]
- PHLEGETHONTIA, Cope, 1871, Proc. Am. Phil. Soc. [Ety. *phlegetho*, to scorch, to burn.]
- linearis, Cope, 1874, Trans. Am. Phil. Soc., Coal Meas. [Sig. lined.]
- serpens, Cope, 1874, Trans. Am. Phil. Soc., Coal Meas. [Sig. a serpent.]
- PLEUROPTYX, Cope, 1875, Ohio Pal., vol. 2. [Ety. *pleura*, a rib; *ptyx*, a fold, a wing.]
- clavatus, Cope, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. club-shaped.]
- PTYONIUS, Cope, 1874, Trans. Am. Phil. Soc. [Ety. *ptyon*, a fan.]
- marshi, Cope, 1875, (*Colosteus marshii*) Ohio Pal., vol. 2, Coal Meas. [Ety. proper name.]
- nummifer, Cope, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. coin-bearing.]
- pectinatus, Cope, 1868, (*Sauroplesura pectinata*) Proc. Acad. Nat. Sci., Coal Meas. [Sig. pectinated, toothed like a comb.]
- serrula, Cope, 1874, Trans. Am. Phil. Soc., Coal Meas. [Sig. a saw.]
- vinchellanus, Cope, 1871, (*Oestocephalus vinchellanus*) Proc. Am. Phil. Soc., Coal Meas. [Ety. proper name.]
- Pygopterus*, Agassiz, 1833, Recherch. Poiss. Foss.
- scutellatus*, see *Colosteus scutellatus*.
- Raniceps*, Wyman, 1858, Am. Jour. Sci. & Arts. [Sig. frog-headed.] Name was preoccupied.
- lyellii*, see *Pelion lyelli*.
- SAUROPLEURA, Cope, 1868, Proc. Acad. Nat. Sci. Phil. [Ety. *sauros*, a lizard; *pleura*, a rib.]
- digitata, Cope, 1868, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. having fingers or toes.]
- newberryi, Cope, 1875, Ohio Pal., vol. 2, Coal Meas. [Ety. proper name.]
- pectinatus, see *Ptyonius pectinatus*.
- remex, Cope, 1868, Proc. Acad. Nat. Sci., Coal Meas. [Sig. a rower.]
- SAUROPUS, Lea, 1849, Trans. Am. Phil. Soc., vol. 10. [Ety. *sauros*, a lizard; *pous*, a foot.]
- primævus, Lea, 1849, Trans. Am. Phil. Soc., vol. 10, Coal Meas. [Sig. first.]

- sydenensis, Dawson, 1868, Acad. Geol., Coal Meas. [Ety. proper name.]
- unguifer, Dawson, 1872, Geo. Mag., vol. 9, Coal Meas. [Sig. claw-bearing; from the peculiar appendages to the hind foot.]
- SPHEROPEZIUM, King, 1845, Am. Jour. Sci., vol. 48. [Ety. *sphaira*, sphere; *pezia*, sole of the foot.]
- leptodactylum, King, 1845, Am. Jour. Sci., vol. 48, Coal Meas. [Sig. slender-fingered or slender-toed.]
- ovoidactylum, King, 1845, Am. Jour. Sci., vol. 48, Coal Meas. [Sig. having egg-shaped toes.]
- pachydactylum, King, 1845, Am. Jour. Sci., vol. 48, Coal Meas. [Sig. thick-toed.]
- therodactylum, King, 1845, Am. Jour. Sci., vol. 48, Coal Meas. [Sig. hinge-toed.]
- THENAROPUS, King, 1846, Am. Jour. Sci., vol. 48. [Ety. *thenaros*, palm of the hand; *pous*, foot.]
- heterodactylus, King, 1845, Am. Jour. Sci., vol. 48, Coal Meas. [Sig. irregular-toed.]
- leptodactylus, King, 1846, Proc. Acad. Nat. Sci., vol. 2, Coal Meas. [Sig. slender-toed.]
- ovoidactylus, King, 1846, Proc. Acad. Nat. Sci., vol. 48, Coal Meas. [Sig. ovoid-toed.]
- pachydactylus, King, 1846, Proc. Acad. Nat. Sci., vol. 48, Coal Meas. [Sig. thick-toed.]
- sphærodactylus, King, 1846, Proc. Acad. Nat. Sci., vol. 48, Coal Meas. [Sig. spherical-toed.]
- THYRSIDIUM, Cope, 1875, Ohio Pal., vol. 2. [Ety. *thyrsos*, light shaft.]
- fasciculare, Cope, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. a small bundle.]
- TUDITANUS, Cope, 1871, Proc. Am. Phil. Soc. [Ety. proper name.]
- brevirostris, Cope, 1874, Trans. Am. Phil. Soc., Coal Meas. [Sig. short-beaked.]
- huxleyi, Cope, 1874, Trans. Am. Phil. Soc., Coal Meas. [Ety. proper name.]
- longipes, Cope, 1874, (*Sauropseura longipes*) Trans. Am. Phil. Soc., Coal Meas. [Sig. long-footed.]
- mordax, Cope, 1875, Ohio Pal., vol. 2, Coal Meas. [Sig. given to biting.]
- obtus, Cope, 1868, Proc. Acad. Nat. Sci. Phil., Coal Meas. [Sig. obtuse.]
- punctulatus, Cope, 1874, Trans. Am. Phil. Soc., Coal Meas. [Sig. well punctured.]
- radiatus, Cope, 1874, Trans. Am. Phil. Soc., Coal Meas. [Sig. radiating from a point.]

# ADDENDA.

Prof. James Hall, of New York, has proposed new names for his species, that were found preoccupied in the course of this work. Part of these new names were received in time to fall in their proper places, others are added here.

**AMPLEXUS** *hamiltoniae*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Ety. proper name.]

*intermittens*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. interrupted, left at intervals.]

**BELLEROPHON** *textilis*, Hall, 1877, Warsaw Gr. [Sig. woven.] Proposed instead of *B. cancellatus*, Hall, 1858, which was preoccupied.

*triliratus*, Hall, 1877, Chemung Gr. [Sig. three-lined.] Proposed instead of *B. tricarinatus*, Hall, 1876, which was preoccupied.]

**BUCANIA** *euomphaloides*, Owen, 1862, Geo. Sur. Ind. [Ety. from its resemblance to an *Euomphalus*.] Not very satisfactorily defined.

*profunda*, Hall, 1859, is the same as *B. (Euomphalus) profunda*, Conrad, 1841.

**CHÆTETES** *fruticosus*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. bushy.]

*furcatus*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. forked.]

*humilis*, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. small.]

*tabulatus*, Hall, 1876, Illust. Devonian Foss., Low. Held. Gr. [Sig. tabulated.]

*tenuis*, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. slender.]

**CONULARIA** *crawfordsvillensis*, Owen, 1862, Geo. Sur. Ind., Keokuk Gr. [Ety. proper name.]

**CYATHOPHYLLUM** *conatum*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. an effort.]

*galerum*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. a cap.]

*gradatum*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. made with steps.]

*nanum*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. a dwarf.]

*nepos*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Ety. proper name.]

*palum*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. a stake.]

*perlamellosum*, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. having many lamellæ.]

*robustum*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. robust.]

*subcaespitosum*, Meek, 1872, Hayden's Geo. Rep., Low. Carb. [Ety. from a resemblance to *C. caespitosum*.]

*validum*, Hall, 1876, Illust. Devonian Foss., Up. Held. Gr. [Sig. stout.]

**CYCLONEMA** *obsolescens*, Hall, 1877, Chemung Gr. [Sig. grown old.] Proposed instead of *C. obsoleta*, Hall, 1876, which was preoccupied.

**CYRTOCERAS** *hallanum*, D'Orbigny, 1850, Prodr. de Pal., Trenton Gr. [Ety. proper name.] Proposed instead of *C. lamellosum*, Hall, 1847, which was preoccupied.]

*olenus*, Hall, 1877, Schoharie grit. [Ety. mythological name.] Proposed instead of *C. orion*, Hall, 1876, which was preoccupied.]

*subannulatum*, D'Orbigny, 1850, Prodr. de Pal., Black Riv. & Trenton Gr. [Sig. somewhat annulated.] Proposed instead of *C. annulatum*, Hall, 1847, which was preoccupied.

*subarcuatum*, D'Orbigny, 1850, Prodr. de Pal., Trenton Gr. [Sig. somewhat arched.] Proposed instead of *C. arcuatum*, Hall, 1847, which was preoccupied.

*subcancellatum*, Hall, 1877, Niagara Gr. [Sig. somewhat cancellated.] Proposed instead of *C. cancellatum*, Hall, 1852, which was preoccupied.

*tenuistriatum*, Hall, 1877, Trenton Gr. [Sig. finely lined.] Proposed instead of *C. corniculum*, Hall, 1862, which was preoccupied.

**CYSTIPHYLLUM** *conifollius*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. an inflated cone.]

*corrugatum*, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. corrugated.]

- varians, Hall, 1876, *Illust. Devonian Foss.*, Ham. Gr. [Sig. variable.]
- DENTALIUM sublaeve, Hall, 1877, *Coal Meas.* [Sig. somewhat smooth.] Proposed instead of *D. obsoletum*, Hall, 1858, which was preoccupied.
- DISCINA saffordi, Winchell, 1869, *Geo. Tenn.*, Low. Carb. [Ety. proper name.]
- EODON, Hall, 1877. Proposed instead of Microdon, Conrad, which was preoccupied. [Ety. *eos*, beginning; *odous*, a tooth; from the rudimentary teeth.]
- bellistriatus, Conrad, 1842, (*Microdon bellistriata*) *Jour. Acad. Nat. Sci.*, vol. 8, Ham. Gr. [Sig. beautifully lined.]
- complanatus, Hall, 1870, (*Microdon complanatus*) *Prelim. Notice Lam. shells*, Ham. Gr. [Sig. smoothed.]
- gregarius, Hall, 1870, (*Microdon gregaria*) *Prelim. Notice Lam. shells*, Ham. Gr. [Sig. gregarious.]
- reservatus, Hall, 1870, (*Microdon reservatus*) *Prelim. Notice Lam. shells*, Waverly Gr. [Sig. reserved.]
- tenuistriatus, Hall, 1870, (*Microdon tenuistriata*) *Prelim. Notice Lam. shells*, Ham. Gr. [Sig. finely lined.]
- EUOMPHALUS decollatus, Hall, 1877, Low. Held. Gr. [Sig. decollated, beheaded.] Proposed instead of *E. disjunctus*, Hall, 1859, which was preoccupied.
- hecale, Hall, 1876, is the same species described by Hall, 1843, as *E. depressus*, which was preoccupied.
- EUSARCUS, Grote & Pitt, 1876, *Buff. Acad. Nat. Sci.*, vol. 3. [Ety. *eusarkos*, fleshy.] This belongs to the family *Euripteridae*.
- scorpionis, Grote & Pitt, 1876, *Buff. Acad. Nat. Sci.*, Waterline Gr. [Sig. a scorpion.]
- FAVOSITES arbuscula, Hall, 1876, *Illust. Devonian Foss.*, Ham. Gr. [Ety. proper name.]
- argus, Hall, 1876, *Illust. Devonian Foss.*, Ham. Gr. [Ety. mythological name.]
- emmonsii, Hall, 1876, *Illust. Devonian Foss.*, Up. Held. Gr. [Ety. proper name.]
- epidermatus *var. biloculi*, Hall, 1876, *Illust. Devonian Foss.*, Up. Held. Gr. [Sig. having a double receptacle.]
- epidermatus *var. corticosus*, Hall, 1876, *Illust. Devonian Foss.*, Up. Held. Gr. [Sig. covered with a crust.]
- explanatus, Hall, 1876, *Illust. Devonian Foss.*, Ham. Gr. [Sig. spread out.]
- hamiltoniae, Hall, 1876, *Illust. Devonian Foss.*, Ham. Gr. [Ety. proper name.]
- hemisphericus *var. distortus*, Hall, 1876, *Illust. Devonian Foss.*, Up. Held. Gr. [Sig. distorted.]
- hemisphericus *var. rectus*, Hall, 1876, *Illust. Devonian Foss.*, Up. Held. Gr. [Sig. straight.]
- GRAPTOLITHUS subtennis, Hall, 1877, *Hud. Riv. Gr.* [Sig. somewhat slender.] Proposed instead of *G. tenuis*, Hall, which was preoccupied.
- GYROCERAS rhombolineare, Owen, 1862, *Geo. Sur. Indiana*. [Sig. from the rhomb-like markings.]
- HALYSITES sexto-attenuatus, Owen, 1862, *Geo. Sur. Indiana, Niagara Gr.* [Sig. having six contracted places.]
- HELIOPHYLLUM arachne, Hall, 1876, *Illust. Devonian Foss.*, Ham. Gr. [Ety. mythological name.]
- confluens, Hall, 1876, *Illust. Devonian Foss.*, Ham. Gr. [Sig. confluent, running together.]
- degener, Hall, 1876, *Illust. Devonian Foss.*, Ham. Gr. [Sig. degenerated.]
- halleri *var. reflexum*, Hall, 1876, *Illust. Devonian Foss.*, Ham. Gr. [Sig. reflexed.]
- halleri *var. obconicum*, Hall, 1876, *Illust. Devonian Foss.*, Ham. Gr. [Sig. inversely conical.]
- irregulare, Hall, 1876, *Illust. Devonian Foss.*, Ham. Gr. [Sig. irregular.]
- proliferum, Hall, 1876, *Illust. Devonian Foss.*, Ham. Gr. [Sig. prolific.]
- LINGULA perplexa, Hall, 1877, *Clinton Gr.* [Sig. perplexing.] Proposed instead of *L. elliptica*, Hall, 1843, which was preoccupied.
- LOXONEMA emaceratum, Hall, 1877, Low. Held. Gr. [Sig. thin, emacrated.] Proposed instead of *L. attenuatum*, Hall, 1859, which seems to have been preoccupied by Stevens, 1858, under the name *Chemnitzia attenuata*.
- semicostata*, Meek, is a syn. for *L. (Chemnitzia) attenuata* of Stevens.
- MACROCHEILUS attenuatum, Hall, 1877, *Chazy Gr.* [Sig. attenuated.] Proposed instead of *M. fusiforme*, Hall, 1858, which was preoccupied.
- MICHELINIA dividua, Hall, 1876, *Illust. Devonian Foss.*, Ham. Gr. [Sig. divisible.]
- stylopore, Eaton, 1832, (*Astrea stylopore*) *Geo. Text Book*, Ham. Gr. [Sig. having pointed cells.]
- MURCHISONIA decurta, Hall, 1877, *Chazy Gr.* [Sig. cut off.] Proposed instead of *M. abbreviata*, Hall, 1847, which was preoccupied.
- micula, Hall, 1877, Ham. Gr. [Sig. a little crumb.] Proposed instead of *M. turricula*, Hall, 1862, which was preoccupied.
- milleri, Hall, 1877, *Trenton & Cin'ti Gr.* [Ety. proper name.] Proposed instead of *M. bicincta*, Hall, 1847, which was preoccupied.
- ORTHOCERAS clintoni, Hall, 1877, *Chazy Gr.* [Ety. proper name.] Proposed instead of *O. subarcuatum*, Hall, 1847, which was preoccupied.
- desideratum, Hall, 1877, Low. Held. Gr. [Sig. to be desired.] Proposed instead of *O. clavatum*, Hall, 1859, which was preoccupied.

- hallanum, S. A. Miller, 1877, Cin'ti Gr. [Ety. proper name.] Proposed instead of *O. halli*, in Cin. Quar. Jour. Sci., which was preoccupied by Barrande.
- olorus, Hall, 1877, Trenton Gr. [Ety. mythological name.] Proposed instead of *O. vertebrale*, Hall, 1847, which was preoccupied.
- orus, Hall, 1877, Niagara Gr. [Ety. mythological name.] Proposed instead of *O. columnare*, Hall, 1860, which was preoccupied.
- socialis, Hall, 1877, Hud. Riv. Gr. [Sig. social.] Proposed instead of *O. gregarium*, Hall, 1861, which was preoccupied.
- stylus, Hall, 1877, Schoharie grit. [Sig. an upright pointed body.] Proposed instead of *O. baculum*, Hall, 1862, which was preoccupied.
- subcancellatum, Hall, 1877, Niagara Gr. [Sig. somewhat cancellated.] Proposed instead of *O. cancellatum*, Hall, 1852, which was preoccupied.
- sublæve, D'Orbigny, 1850, Prodrome de Pal., Onondaga Gr. [Sig. somewhat smooth.] Proposed instead of *O. læve*, Hall, 1843, which was preoccupied.
- PHILLIPSIA tennesseensis, Winchell, 1869, Geo. of Tenn., Low. Carb. [Ety. proper name.]
- PLATYCERAS pabulocrinus, Owen, 1862, (Pileopsis pabulocrinus) Geo. Sur. Indiana, Keokuk Gr. [Ety. from an erroneous idea that the species subsisted on the crinoid.]
- Platystoma lineatum*, Hall, is identical with *P. lineatum* Conrad.
- PLEUROTOMARIA subglobosa, Hall, 1877, Warsaw Gr. [Sig. somewhat globose.] Proposed instead of *P. rotundata*, Hall, 1858, which was preoccupied.
- nodulosa*, Hall, 1847, is probably a poor specimen of *Trochonema umbilicata*.
- tenuimarginata*, Hall, 1877, Warsaw Gr. [Sig. slender-margined.] Proposed instead of *P. concava*, Hall, 1858, which was preoccupied.
- POLYPHEMOPSIS teretiformis, Hall, 1877, Warsaw Gr. [Sig. of a long round-shape.] Proposed instead of *P. elongata*, Hall, 1858, which was preoccupied.
- PRODUCTUS incurvatus, Shepard, 1838, Am. Jour. Sci., vol. 34, Coal Meas. [Sig. from the incurved basal margin.]
- pectenoideus, Shepard, 1838, Am. Jour. Sci., vol. 34, Coal Meas. [Sig. like a shell of the genus *Pecten*.]
- semipunctatus, Shepard, 1858, Am. Jour. Sci., vol. 34, Coal Meas. [Sig. half-punctated.]
- Quenstedtia*, a genus, on page 60, was preoccupied in the Class Lamellibranchiata, by Morris & Lycett, in 1853.
- STREPTELASMA ungula, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. a hoof.]
- profundum*, Hall, is probably identical with *S. (Cyathophyllum) profundum*, Conrad.
- STRIATOPORA limbata, Eaton, 1832, (Madrepora limbata) Geo. Text Book, Ham. Gr. [Sig. bordered.]
- Terebratula argentea*, see *Athyris argentea*.
- TREMATOPORA spiculata, Hall, 1877, Niagara Gr. [Sig. having little points.] Proposed instead of *T. spinulosa*, Hall, 1876, which was preoccupied.
- ZAPHRENTIS ampla, Hall, 1876, Illust. Devonian Foss., Ham. Gr. [Sig. full, large.]
- cannonensis*, Winchell, 1869, Geo. Tenn., Low. Carb. [Ety. proper name.]
- eccentrica*, Meek, 1871, Hayden's Geo. Rep., Low. Carb. [Sig. eccentric, from the center.]
- halli*, Edwards & Haime, 1851, Polyp. Foss. Terr. Palæoz., Ham. Gr. [Ety. proper name.]

# CORRIGENDA.

---

In addition to the facilities offered in the Preface, in the article of Prof. Claypole, and in the Index of Genera for correcting specific names, the following corrections are deemed worthy of notice:

- Read horny fracture for corny fracture, on page 13.
- Read opusculum for opusculus, on page 67.
- Read pistillum for pistillus, on page 72.
- Read rhombiferus for rhombiferous, on page 85.
- Read remus for remos, on page 85.
- Read varsoviensis for varsouviensis, on page 86.
- Read pumilus for pumilis, on page 87.
- Read differens for differentis, on page 104.



THE  
AMERICAN  
PALÆOZOIC FOSSILS:

A CATALOGUE

OF THE  
GENERA AND SPECIES,

WITH

NAMES OF AUTHORS, DATES, PLACES OF PUBLICATION, GROUPS OF ROCKS IN WHICH  
FOUND AND THE ETYMOLOGY AND SIGNIFICATION OF THE WORDS,

AND

AN INTRODUCTION

DEVOTED TO THE STRATIGRAPHICAL GEOLOGY OF THE PALÆOZOIC ROCKS.

---

SECOND EDITION—JANUARY, 1883.

---

BY S. A. MILLER.

---

CINCINNATI, OHIO:  
PUBLISHED BY THE AUTHOR, No. 8 W. THIRD ST.

1883.

---

Entered according to act of Congress, in the year 1882, by

S. A. MILLER,

In the Office of the Librarian of Congress, at Washington.

---

## PREFACE TO THE SECOND EDITION.

---

The first edition of this work was published by the author in 1877. No work of the kind had ever appeared, and no encouragement for the undertaking had been received. The author had confidence in its value to science, and published it himself. This condition of affairs is well expressed by the distinguished Prof. Leo. Lesquereux, in a letter addressed to the author, while the work was in press, on the 28th of March, 1877. He said:

"Your kind favor of the 25th, and the page of prospectus of your catalogue are received. You will please allow me to say freely, that when I received your first letter advising me of the preparation or publication of a catalogue of the American Palæozoic Fossils, I did not think much of a work of the kind, for the reason that I knew by experience what amount of time and research would be necessary for the preparation of such a work as the one you were about to publish, and could not suppose that in this country, where science is so generally considered under a remunerative point of view, there was a naturalist disposed to make the researches you have so well done for mere love of science. But after the perusal of your first proof sheets, my opinion was fully reversed, and I recognized immediately the great value of your catalogue, the assistance which it will afford to all the palæontologists, and the accuracy with which you have pursued the immense amount of researches necessitated for its preparation. For what concerns myself personally, I thank you sincerely for this production, and I am certain that every palæontologist will do the same."

After he had received a copy of the work, he again wrote as follows :

"I am sincerely glad to have the whole catalogue, though I have also good use of the separate copy of the botanical part, which, bound with intermixed blank leaves, serves me as a very commodious referendium, especially for new American species of coal plants. Your excellent, most useful catalogue, in its fullness receives a degree of interest from the Introductory remarks, those on the construction of systematic names, and the Geological introduction. The work is, indeed, one of devotion to science. It may not bring you pecuniary reward, but you will have the satisfaction to know that it has helped many, and been of great use, or will be hereafter, for the advancement of palæontological science. For, indeed, it is a true dictionary, and should be in the hands of every American geologist."

No testimonials of the value of the work were ever solicited, but they came, nevertheless, from all parts of this country and from abroad. Only a few more will be selected. Prof. James Hall, of New York, wrote:

"You have done a valuable work, for which the thanks of every describer

## PREFACE.

of fossils are due; indeed, I do not recall the publication of a single book within the past twenty years so necessary and useful to the geologist and palæontologist."

Prof. John H. Klippart, of Columbus, Ohio:

"I like the work very much. It is just such a work as I have long since very much needed. It will prove to the student of fossils what Webster's unabridged proves to the scholar—that it is simply indispensable. There is no work to take its place, or that can be substituted for it."

Prof. G. C. Broadhead, of Missouri:

"I find it a useful book for a student of palæontology, and it supplies a necessity which experience has demanded."

Prof. Henry G. Hanks, of California:

"I am very much pleased with the work. It is just what I want."

Prof. R. H. Holbrook, of New Jersey:

"I consider it a valuable work worth many times the price."

Rev. J. Allen, President Alfred University, Pa.:

"We find your book a very valuable production—a great aid."

Prof. J. W. Dawson, of Montreal:

"I have found the book very useful, and hope you will follow it up with supplements as new species are described."

Prof. G. Lindstrom, of Stockholm, Sweden:

"I bought your excellent catalogue of the North American Palæozoic Fossils, for use in the Museum, and I dare say that scarcely a day passes by without my consulting it."

The notices this book has received in scientific periodicals have been no less flattering, as will be observed in the *Annals and Magazine of Natural History*, 1878, 5th ser., vol. i., p. 99, and the *Geological Magazine* of London, for October 1877, p. 472.

Under these circumstances, I have been induced to prepare a supplement, for the unbound copies remaining on hand, and to publish it in this form for a second edition. The supplement contains the genera and species described since 1877, those that were overlooked in the first edition, corrected references of species to genera, corrections of the more serious mistakes and typographical errors, and a new index of the genera. The Vegetable Kingdom is arranged in orders and classes, the Class Echinodermata is re-subdivided, some new orders and new families are briefly defined, and a few specific names have been proposed by the author for those preoccupied, which constitute the new features of the supplement. In addition to the corrections, the fossils described in the 23d and 24th Reports of the Reg. of the Univ. of N. Y., on the condition of the St. Cab. of Nat. Hist., should be accredited to Hall and Whitfield, instead of to Hall alone, and the Cincinnati Group should, in all cases, be stricken out, and, in nearly every instance, the Hud. Riv. Gr. inserted, a few species only being referable to the Trenton and Utica Slate.

S. A. MILLER.

CINCINNATI, OHIO, December, 1882.

## SUPPLEMENT.

### VEGETABLE KINGDOM.

In the first edition of this work, no attempt was made to arrange the fossils of the vegetable kingdom, represented in the palæozoic rocks, into classes, orders, or families, for reasons then expressed; since that time, however, the work of Leo Lesquereux on the coal flora of Pennsylvania has rendered possible a classification which will be of some utility, though only approximately correct.

#### CELLULAR CRYPTOGRAMOUS PLANTS.

CLASS FUNGI.—Rhizomorpha.

CLASS THALASSOPHYTES.—Arthraria, Arthrophycus, Asterophycus, Blastophycus, Buthotrephis, Calamophycus, Chondrites, Conostichus, Cruziana, Dactylophycus, Discophycus, Dystactophycus, Eophyton, Heliophycus, Hippodophycus, Ichnophycus, Licrophycus, Palæochorda, Palæophycus, Phytopsis, Protostigma, Rusophycus, Sphenothallus, Taonurus, Trichophycus.

#### VASCULAR CRYPTOGRAMOUS PLANTS.

CLASS EUISETACEÆ.—Anarthrocanna, Annularia, Arthrostigma, Asterophyllites, Bechera, Bornia, Calamites, Calamodendron, Calamocladus, Calamostachys, Equisetites, Macrostachya, Nematophyllum, Solenoula, Sphenophyllum.

CLASS FILICACEÆ (ferns).

ORDER NEUROPTERIDS.—Danaëites, Dictyopteris, Idiophyllum, Lesleya, Lonchopteris, Megalopteris, Neriopteris, Neuropteris, Odontopteris, Orthogoniopteris, Tæniopteris.

ORDER ALETHOPTERIDS.—Alethopteris, Callipteris, Callipteridium, Lescuopteris, Protoblechnum.

ORDER PSEUDOPECOPTERIDS.—Pseudopecopteris.

ORDER PECOPTERIDS.—Asterocarpus, Cymoglossa, Goniopteris, Oligocarpia, Pecopteris.

ORDER SPHENOPTERIDS.—Asplenites, Eremopteris, Sphenopteris.

ORDER ADIANTITES.—Aneimites, Archæopteris, Cyclopteris, Triphylopteris.

FERNS OF UNCERTAIN AFFINITY.—Crematopteris, Hymenophyllites, Pachypteris, Rhacophyllum.

RACHIS OF FERNS.—Rhachiopteris.

RHIZOMAS OF FERNS.—Rhizomopteris, Stigmarioides.

SEPARATE FRUCTIFICATIONS OF FERNS.—Sorocladus.

STEMS OR TRUNKS OF FERNS.—Caulopteris, Megaphytum, Psaronius, Stemma-  
topteris.

CLASS LYCOPODIACEÆ.—Arthrostigma, Cyclostigma, Dechenia, Diplostegium, Glyptodendron, Halonia, Knorria, Lepidocystis, Lepidodendron, Lepidophloios, Lepidophyllum, Lepidostrobus, Leptophloeum, Lycopodites, Psilophyton, Polyporites, Sporocystis, Sternbergia, Ulodendron.

ORDER TÆNIOPHYLLÆ.—Tæniophyllum.

ORDER SIGILLARIÆ.—Didymophyllum, Pinnularia, Rhizolithes, Sigillaria, Sigillarioides, Stigmaria, Syringodendron.

ORDER NØGGERATHIÆ.—Nøggerathia, Whittleseyia.

CLASS CORDAITEÆ.—Antholithes, Cardiocarpon, Carpolithes, Cordaianthus, Cordaicarpus, Cordaites, Cordaistrobus, Desmiophyllum, Dieranophyllum, Guillelmites, Lepidoxylon, Rhabdocarpus, Trigonocarpum.

CONIFERÆ (?)—Araucarites, Baiera, Dadoxylon, Nematoxylon, Ormoxylon, Prototaxites, Saportea, Syringoxylon, Walchia.

PLANTS OF UNCERTAIN AFFINITY.—Acanthophyton, Asteropteris, Celluloxylon, Palæoxyris, Spirangium, Sporangites.

*ALETHOPTERIS acuta* is *Pecopteris acuta*.  
*ambigua*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. uncertain.]  
*aquilina* was first called *Filicites aquilinus* by Schlotheim in his Flor. d. Vorw. *crenulata*, as identified by Lesquereux, in the Geo. Sur., Ill., vol. 2, is now described as *Pseudopecopteris subcrenulata*.  
*cristata* is *Pecopteris cristata*.  
*distans* is a variety of *A. lonchitica*.  
*emarginata* is *Pecopteris emarginata*.  
*erosa* is *Pecopteris erosa*.  
*gibsoni*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
*halli* is *Pecopteris halli*.  
*helenæ*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
*holdeni* is *Protoblechnum holdeni*.  
*hymenophylloides* is *Pseudopecopteris hymenophylloides*.  
*inflata* is *Callipteridium inflatum*.  
*lanceolata* is *Pecopteris lanceolata*.  
*lonchitica* instead of *A. lonchitidis*.  
*longifolia* is *Pecopteris longifolia*.  
*macrophylla* is *Danaëites macrophyllus*.  
*massillonis* is *Callipteridium massillon-eum*.  
*mazonana* is *Pseudopecopteris mazonana*.  
*muricata* is *Pseudopecopteris muricata*.  
*nervosa* is *Pseudopecopteris nervosa*.  
*obscura*, syn. for *Callipteridium rugosum*.  
*oweni* is *Callipteridium oweni*.  
*pluckeneti* is *Pseudopecopteris pluck-eneti*.  
*pteroides* is *Pecopteris pteroides*.  
*rugosa* is *Callipteridium rugosum*.  
*serrula* is *Pecopteris serrula*.  
*solida* is *Pecopteris solida*.  
*stellata* is *Pecopteris stellata*.  
*tæniopteroides* is *Pecopteris tæniopteroides*.  
*virginiana*, Fontaine and White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Ety. proper name.]  
**ANNULARIA** was described by Sternberg, in 1820, Essai d'un exposé Geognostico-botanique de la flore du monde primitif, 2d cahier.  
*acuminata* is *Sporangites acuminatus*.  
*dawsoni* is *Asterophyllites dawsoni*.  
*emersoni*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
*romingeri*, Lesquereux, 1877, Trans. Am. Phil. Soc., Low. Held. Gr. [Ety. proper name.]  
**ANTHOLITHES** *priscus* was described in 1873, in Ohio Pal., vol. 1.  
**APHLEBIA** *adnascens*, see *Rhacophyllum adnascens*.  
*flabellata*, see *Rhacophyllum flabellatum*.  
*irregularis*, see *Rhacophyllum irregulare*.  
**ARCHEOPTERIS** *bockschiana*, Lesquereux, 1858 (*Næggerathia bockschiana*), Geo. of Penn., vol. 2, Coal Meas. [Ety. proper name.]  
*gaspensis*, Dawson, 1881, Can. Nat. &

Geo., vol. 10, Devonian. [Ety. proper name.]  
**ARCHEOPTERIS** *hallana* instead of *Cyclopteris hallana*.  
*hybernica*, Forbes, 1852 (*Cyclopteris hybernica*), Proc. Brit. Assoc., Chemung Gr. [Ety. proper name.]  
*jacksoni* instead of *Cyclopteris jacksoni*.  
*minor* instead of *Næggerathia minor*.  
*obliqua* instead of *Næggerathia obliqua*.  
*rogersi* instead of *Cyclopteris rogersi*.  
*Aristophycus*, Miller & Dyer, 1878, Cont. to Pal., No. 2. [Ety. *aristos*, excellent; *phukos*, a sea plant.] Probably inorganic.  
*ramosum*, Miller & Dyer, 1878, Cont. to Pal., No. 2, Hud. Riv. Gr. [Sig. branchy.] Probably inorganic.  
*ramosum* var. *germanum*, Miller & Dyer, 1878, Cont. to Pal., No. 2, Hud. Riv. Gr. [Sig. near of kin.] Probably inorganic.  
**Asolanus**, Wood, 1860, Proc. Acad. Nat. Sci. This genus is not recognized by botanists, and is generally regarded as a synonym for *Sigillaria*. *A. camptotenia*, is classed by Lesquereux as a synonym for *Sigillaria monostigma*, and the other two names mentioned by Wood, *A. manephleus*, and *A. ornithicnoides*, are referred to *Sigillaria*.  
**ASTEROPHYCUS** *simplex*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. simple.]  
**ASTEROPHYLLITES** *anthracinus*, Heer, 1877, Fl. Foss. Helv., vol. 4, Coal Meas. [Sig. coal black.]  
*aperta*, syn. for *Macrostachya infundibuliformis*.  
*equisetiformis* was called by Schlotheim, *Casuarinites equisetiformis*, in 1804.  
*fasciculatus*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. bundled.]  
*lanceolatus* syn. for *A. foliosus*.  
*latifolius* should be restored.  
*longifolius* was called *Bruckmannia longifolia*, by Sternberg, in Tent. flor. prim.  
*radiatus*, Brongniart, 1822, Class. d. Veg. Foss. Coal Meas. [Sig. rayed.]  
*rigidus* was called *Bruckmannia rigida*, by Sternberg, in Tent. flor. prim.  
**ASTEROPTERIS**, Dawson, 1881, Lond. Quar. Jour. Geo. Soc., vol. 37. [Ety. *aster*, a star; *pteris*, a fern.]  
*novoboracensis*, Dawson, 1881, Lond. Quar. Jour. Geo. Soc., vol. 37, Portage Gr. [Ety. proper name.]  
**BAIERA**, Fr. Braun, 1840, Die Petrefakten d. Naturalien Samml. [Ety. proper name.]  
*virginiana*, Fontaine and White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Ety. proper name.]  
*Bergeria rhombica*, see *Lepidodendron rhombicum*.

- BLASTOPHYCUS**, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1. [Ety. *blastos*, a bud; *phukos*, a sea weed.]  
*diadematum*, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Utica Slate Gr. [Sig. diademed.]
- BORNIA**, F. A. Reimer, 1854, Palaeontographica, vol. 3. [Ety. proper name.]  
*radiata*, Brongniart, 1828 (Calamites radiatus), Hist. d. Veg. Foss., Sub-carboniferous. [Sig. radiated.]  
*Brachyphyllum obtusum* is *Lepidocystis obtusum*.  
*Bruckmannia longifolia*, see *Asterophyllites longifolius*.  
*rigida*, see *Asterophyllites rigidus*.
- BUTHOTREPHIS** asteroides, Fitch, 1849, Trans. Ag. Soc., Quebec Gr. [Sig. star like.]  
*rigida*, Emmons, 1844 (*Fucoides rigidus*) Taconic Syst., Quebec Gr. [Sig. rigid.]
- CALAMITES** *arenaceus* is a Triassic species. *decoratus* may be erased.  
*dubius*, was published in 1825.  
*major*, Weiss, 1872, Fossil Flora d. jungsten steinkohlen formation, Coal Meas. [Sig. large.]  
*radiatus*, see *Bornia radiata*.  
*ramifer*, Stur, 1875, Culm. Flora d. Mährisch-Schlesischen Dachschiefers, Coal Meas. [Sig. bearing branches.]  
*ramosus*, was published in 1825.  
*sulcatus* may be erased.  
*transitionis* is Gœppert's species, as identified by Dawson.  
*undulatus* was described by Brongniart in 1828, in Hist. d. Veg. Foss., vol. 1.
- CALAMODENDRON** is Brongniart's Genus.
- CALAMOPHYCUS**, Lesquereux, 1877, Proc. Am. Phil. Soc. [Ety. *calamus*, a reed; *phukos*, a sea plant.]  
*septus*, Lesquereux, 1877, Proc. Am. Phil. Soc., Devon. [Sig. enveloped.]
- CALAMOSTACHYS**, Schimper, 1869, Traite de Paleontologie Vegetale, vol. 1, p. 328. [Ety. *Calamus*, a reed; *Stachys*, a plant.]  
*praelongus*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. very long.]
- CALLIPTERIDIUM**, Weiss, 1872, Foss. Flora d. jungsten steinkohlen formation. [Ety. from the genus *Callipteris*.]  
*aldrichi*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
*dawsonianum*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Ety. proper name.]  
*grandifolium*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. large leaved.]  
*inflatum*, Lesquereux, 1870 (*Alethopteris inflata*), Geo. Sur. Ill., vol. 4. Coal Meas. [Sig. inflated.]  
*inaequale*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. unequal.]  
*mansfieldi*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]
- CALLIPTERIDIUM** *massilloneum* instead of *Alethopteris massillonis*.  
*membranaceum*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. membranaceous.]  
*neuropteroides*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. like *Neuropteris*.]  
*oblongifolium*, Fontaine & White, Perm. or Up. Carb. Flora, Coal Meas. or Perm. [Sig. oblong leaved.]  
*odontopteroides*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Perm. [Sig. like *Odontopteris*.]  
*oweni* instead of *Alethopteris oweni*.  
*pardee*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
*rugosum* instead of *Alethopteris rugosa*.  
*sullivanti* instead of *Callipteris sullivanti*.  
*unitum*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. united.]
- CALLIPTERIS** *conferta*, Sternberg (*Sphenopteris conferta*), Tent. flor. prim., Coal Meas. or Permian. [Sig. close together.]  
*pilosa* instead of *Sphenopteris pilosa*.
- CARDIOCARPON** *annulatum*, C. *elongatum*, C. *latum*, C. *minus*, C. *orbiculare*, and C. *samaraeforme*, were described in 1873, in Ohio Pal., vol. 1.  
*apiculatum*, Goeppert & Berger, 1848, De fructibus et seminibus, Coal Meas. [Sig. having a pointed termination.]  
*bicornutum* instead of *Ptilocarpus bicornutus*.  
*congruens*, Grand'Eury, 1877, Flore Carbonifere, Coal Meas. [Sig. running together.]  
*diminutivum*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. diminutive.]  
*fasciculatum*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. bundled.]  
*late-alatum*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. broad winged.]  
*mamillatum* instead of *Rhabdocarpus mamillatus*.  
*marginatum* was described in 1825.  
*ovatum*, Grand'Eury, 1877, Flore Carbonifere, Coal Meas. [Sig. ovate.]  
*pachytista*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. having thick testa.]  
*regulare*, Sternberg, 1821-38, Flor. d. Vorwelt., Coal Meas. [Sig. regular.]  
*simplex*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. simple.]  
*zonulatum*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. small girded.]
- CARDIOPTERIS**, Schimper, 1869, Traite de Paleontologie Vegetale, vol. 1, p. 451. [Ety. *kardia*, heart; *pteris*, a fern.]



- CARDIOPTERIS** *eriana*, Dawson, 1881, Quar. Jour. Geo. Soc. Lond., vol. 37, Devonian. [Ety. proper name.]
- CARPOLITHES** *acuminatus*, Sternberg, 1821-38, Flor. d. Vorw., Coal Meas. [Sig. pointed.]
- bicarpus*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. two fruited.]
- bullatus* is *Lepidocystis bullatus*.
- disjunctus* is a syn. for *Trigonacarpus dawesi*.
- jacksonensis* is *Rhabdocarpus jacksonensis*.
- limatus*, read *C. lunatus*.
- marginatus*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. margined. This name was preoccupied by Artis in 1825.]
- vesicularis* is *Lepidocystis vesicularis*.
- CASUARINITES** *equisetiformis* is *Asterophyllites equisetiformis*.
- CAULERPITES** was described by Brongniart in 1828, Prodr. d. Hist. d. Veg. Foss.
- marginatus* is *Taonurus marginatus*.
- CAULOPTERIS** *acanthophora* is, probably, *Ulo-dendron punctatum*.
- elliptica*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Perm. [Sig. elliptical.]
- giffordii*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]
- gigantea*, Lesquereux, is *Stemmatopteris gigantea*.
- gigantea*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. large.]
- insignis* is *Stemmatopteris insignis*.
- lacoeei*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]
- mansfieldi*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]
- punctata* is *Stemmatopteris punctata*.
- wortheni* is *Stemmatopteris wortheni*.
- CELLULOXYLON**, Dawson, 1881, Lond. Quar. Jour. Geo. Soc., vol. 37. [Ety. *cellula*, a small apartment; *xylon*, wood.]
- primævum*, Dawson, 1880, Lond. Quar. Jour. Geo. Soc., vol. 37, Ham. Gr. [Sig. in the first period of life.]
- Chloephycus**, Miller & Dyer, 1878, Cont. to Pal. No. 2. [Ety. *chlæ*, young grass; *phukos*, a sea plant.] This is probably inorganic.
- plumosum*, Miller & Dyer, 1878, Cont. to Pal., No. 2, Hud. Riv. Gr. [Sig. feathered.] This is probably inorganic.
- CHONDrites** *colletti* is *Taonurus colletti*.
- CONOSTICHUS** *broadheadi*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]
- prolifer*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. bearing off-spring.]
- CORDAIANTHUS**, Grand'Eury, 1877, Flore Carbonifere. [Ety. *Cordaites*, a genus; *anthos*, a flower.]
- dichotomus*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. divided.]
- ovatus*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. ovate.]
- simplex*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. simple.]
- CORDAICARPUS**, Grand'Eury, 1877, Flore Carbonifere. [Ety. *Cordaites*, a genus; *karpos*, fruit.]
- apiculatus*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. pointed.]
- costatus*, see *Cordaites costatus*.
- gutbieri*, Grand'Eury, 1877, Flore Carbonifere, Coal Meas. [Ety. proper name.]
- ovatus*, Grand'Eury, 1877, Flore Carbonifere, Coal Meas. [Sig. ovate.]
- CORDAISTROBUS**, Lesquereux, 1880, Coal Flora of Pa. [Ety. *Cordaites*, a genus; *strobos*, a cone.]
- grandeuryi*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. prop. name.]
- CORDAITES** *communis*, Lesquereux, 1878, Proc. Am. Phil. Soc., Coal Meas. [Sig. common.]
- costatus*, Lesquereux, 1879, Proc. Am. Phil. Soc., Coal Meas. [Sig. costate.]
- crassinervis*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. thick nerved.]
- crassus*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. thick.]
- diversifolius*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. diverse leaved.] Proposed instead of *L. angustifolius*, Lesquereux.
- gracilis*, Lesquereux, 1878, Proc. Am. Phil. Soc., Coal Meas. [Sig. slender.]
- grandifolius*, Lesquereux, 1878, Proc. Am. Phil. Soc., Coal Meas. [Sig. grand leaved.]
- lacoeei*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]
- lingulatus*, Grand'Eury, 1877, Flore Carbonifere, Coal Meas. [Sig. tongue shaped.]
- mansfieldi*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]
- radiatus*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. radiated.]
- serpens*, Lesquereux, 1878, Proc. Am. Phil. Soc., Coal Meas. [Sig. creeping.]
- validus*, Lesquereux, 1878, Proc. Am. Phil. Soc., Coal Meas. [Sig. strong.]
- CYCLOPTERIS** *alleghaniensis*, syn. for *Archæopteris rogersi*.
- browni* is *Rhacophyllum browni*.
- elongata*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. elongated.]
- germari* is *Neuropteris germari*.
- hallana* is *Archæopteris hallana*.
- jacksoni* is *Archæopteris jacksoni*.

**CYCLOPTERIS** *laciniata* is *Neuropteris laciniata*.  
*lescuriana* is *Triphylopteris lescuriana*.  
*problematica*, Dawson, 1871, Foss. Plants, Dev. & Up. Sil., Middle Devonian. [Sig. problematical.]  
*rogersi* is *Archæopteris rogersi*.  
*trichomanoides* is *Neuropteris trichomanoides*.  
*virginiana* is *Pseudopecopteris virginiana*.  
**CYCLOSTIGMA** *affine*, Dawson, 1881, Quar. Jour. Geo. Soc., Lond., vol. 37, Devonian. [Sig. near to.]  
*kiltorkense*, Houghton, 1860, Ann. & Mag. Nat. Hist., 3d ser., vol. 5, Subcarboniferous. [Ety. proper name.]  
**CYMOGLOSSA**, Schimper, 1869, *Traite de Paleontologie Vegetale*, vol. 1, p. 553. [Ety. *kumo*, wavy; *glossa*, a tongue.]  
*breviloba*, Fontaine & White, 1880, Perm. & Up. Carb. Flora, Coal Meas. or Permian. [Sig. short lobed.]  
*formosa*, Fontaine & White, 1880, Perm. & Up. Carb. Flora, Coal Meas. or Permian. [Sig. beautiful.]  
*lobata*, Fontaine & White, 1880, Perm. & Up. Carb. Flora, Coal Meas. or Permian. [Sig. lobed.]  
*obtusifolia*, Fontaine & White, 1880, Perm. & Up. Carb. Flora, Coal Meas. or Permian. [Sig. obtuse leaved.]  
**DACTYLOPHYCUS**, Miller & Dyer, 1878, Cont. to Pal., No. 2. [Ety. *dactylos*, a finger; *phukos*, a sea plant.]  
*quadrupartitum*, Miller & Dyer, 1878, Cont. to Pal., No. 2, Utica Slate Gr. [Sig. four parted.]  
*tridigitatum*, Miller & Dyer, 1878, Cont. to Pal., No. 2, Utica Slate Gr. [Sig. three fingered.]  
**DANÆITES** *emersoni*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
*macrophyllus* instead of *Alethopteris macrophylla*.  
**DECHENIA**, Goeppert, 1841-48, *Die Gattungen der fossilen Pflanzen*. [Ety. proper name.]  
*striata*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. striated.]  
**DESMIOPHYLLUM**, Lesquereux, 1880, Coal Flora of Pa. [Ety. *desmos*, a band; *phyllon*, a leaf.]  
*gracile*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. slender.]  
**DICRANOPHYLLUM**, Grand'Eury, 1877, *Flore Carbonifere*. [Ety. *dikranos*, two pointed; *phyllon*, a leaf.]  
*dichotomum*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. divided.]  
*dimorphum*, Lesquereux, 1878, Proc. Am. Phil. Soc., Coal Meas. [Sig. double formed.]  
*Dictyophyton* is not a plant. It is supposed to be a sponge.  
**DIDYMOPHYLLUM** *oweni*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]

**DISCOPHYCUS**, Walcott, 1879, Trans. Alb. Inst., vol. 10. [Ety. *diskos*, a disk; *phukos*, a sea weed.]  
*typicale*, Walcott, 1879, Trans. Alb. Inst. vol. 10, Utica Slate. [Sig. the type.]  
**DYSTACTOPHYCUS**, Miller & Dyer, 1878, Cont. to Pal., No. 2. [Ety. *dystaktos*, hard to arrange; *phukos*, a sea plant.]  
*mamillanum*, Miller & Dyer, 1878, Cont. to Pal., No. 2, Hud. Riv. Gr. [Sig. protuberant.]  
**EQUISETITES** *macrodontus*, Wood, 1860, Proc. Acad. Nat. Sci., Coal Meas. Not satisfactorily defined.  
*wrightianus*, Dawson, 1880, Lond. Geo. Mag., n. s. vol. 7, Up. Devonian. [Ety. proper name.]  
**EREMOPTERIS** *crenulata*, Lesquereux, 1876, Geo. Rep. of Ala., Coal Meas. [Sig. crenulated.]  
*dissecta*, Lesquereux, 1876, Geo. Rep. of Ala., Coal Meas. [Sig. cut up.]  
*elegans*, Ettingshausen, 1852 (*Asplenites elegans*), Die Steinkohlen flora, v. Stradonitz in Böhmen, Coal Meas. [Sig. elegant.]  
*flexuosa*, Lesquereux, 1876, Geo. Rep. of Ala., Coal Meas. [Sig. flexuous.]  
*microphylla*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. small leaved.]  
*missouriensis*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
*Ficoidites scabrosus*, Hildreth, 1837, Am. Jour. Sci. & Arts, vol. 31, Lower Coal Meas. Not recognized.  
*Filicites arborescens*, see *Pecopteris arborescens*.  
*miltoni*, see *Pecopteris miltoni*.  
*plumosus*, see *Pecopteris plumosa*.  
**GLYPTODENDRON**, Claypole, 1878, Am. Jour. Sci. & Arts, 3d ser., vol. 15. [Ety. *glyptos*, sculptured; *dendron*, a tree.]  
*eatonense*, Claypole, 1878, Am. Jour. Sci. & Arts, 3d ser., vol. 15, Niagara Gr. [Ety. proper name.]  
*Goniopteris newberryana*, see *Pecopteris newberryana*.  
*oblonga*, see *Pecopteris oblonga*.  
**GULIELMITES**, Geinitz, 1858, *Leitpflanzen d. Rothleig. u. d. Zechstein*; Sachsen. [Ety. from the genus *Gulielma*.]  
*orbicularis*, Fontaine & White, 1880, Perm. & Up. Carb. Flora, Coal Meas. or Permian. [Sig. orbicular.]  
**HALONIA** *flexuosa*, Goldenburg, 1855 (*Ulodendron flexuosum*), *Flora Sarre-pontana fossilis*, Coal Meas. [Sig. flexuous.]  
*mansfieldi*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
*secreta*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. concealed.]  
*tortuosa*, Lindley & Hutton, 1835, Foss. Flora, vol. 2, p. 11, Coal Meas. [Sig. tortuous.]

**HELIOPHYCUS**, Miller & Dyer, 1878, Cont. to Pal., No. 2. [Ety. *helios*, the sun; *phukos*, a sea plant.]

*stelliforme*, Miller & Dyer, 1878, Cont. to Pal., No. 2, Hud. Riv. Gr. [Sig. star shaped.]

**HYMENOPHYLLITES** *adnascens*, refer to *Rhacophyllum adnascens*.

*arborescens*, refer to *Rhacophyllum arborescens*.

*ballantini*, refer to *Sphenopteris ballantini*.

*clarki*, refer to *Rhacophyllum clarki*.

*flexicaulis*, refer to *Sphenopteris flexicaulis*.

*furcata*, refer to *Sphenopteris furcata*.

*hildrethi*, refer to *Sphenopteris hildrethi*.

*inflatus*, see *Rhacophyllum inflatum*.

*lactuca*, see *Rhacophyllum lactuca*.

*mollis*, see *Rhacophyllum mollis*.

*spinousus*, refer to *Sphenopteris spinosa*.

*strongi*, see *Rhacophyllum strongi*.

*thalliformis*, see *Rhacophyllum thalliforme*.

*trichomanoides*, refer to *Sphenopteris trichomanoides*.

*tridactylites*, refer to *Sphenopteris tridactylites*.

**IDIOPHYLLUM**, Lesquereux, 1880, Coal Flora of Pa. [Ety. *idios*, peculiar; *phyllon*, a leaf.]

*rotundifolium*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. round leaved.]

**LEPIDOCYSTIS**, Lesquereux, 1880, Coal Flora of Pa. [Ety. *lepis*, a scale; *kustis*, a bladder.]

*angularis*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. angular.]

*bullatus* instead of *Carpolithes bullatus*.  
*fraxiniformis*, Geopfert & Berger, 1848 (*Carpolithes fraxiniformis*), De fruct. et sem., Coal Meas. [Sig. like *Fraxinus*.]

*lineatus*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. lined.]

*obtusum* instead of *Brachyphyllum obtusum*.

*pectinatus*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. pectinated.]

*quadrangularis*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. quadrangular.]

*vesicularis* instead of *Carpolithes vesicularis*.

**LEPIDODENDRON** was described by Sternberg in 1820, in *Essai d'un expose Geognostico-botanique de la flore du monde primitif*, 1st Cahier. Also *L. aculeatum*, *L. crenatum*, *L. dichotomum*, *L. obovatum*, *L. rimosum*, *L. selaginoides* and *L. undulatum*.

*andrewsi*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]

*alveolare*, see *Sigillaria alveolaris*.

*brittsi*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]

**LEPIDODENDRON** *chilallæum*, syn. for *L. distans*.

*cuspidatum*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. pointed.]

*cyclostigma*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. round dotted.]

*drepanaspis*, Wood, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. sickle shield.]

*dubium*, syn. for *L. rimosum*.

*elegans*, was *Lycopodiolithes elegans* of Sternberg in Tent. Flor. Prim.

*ichthyolepis*, Wood, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. fish scale.]

*ingens*, syn. for *L. aculeatum*.

*lanceolatum*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. lanceolated.]

*latifolium*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. wide leaved.]

*lesquereuxi*, Wood, syn. for *L. aculeatum*.

*longifolium*, Brongniart, 1828, Prodr. Hist. Veg. Foss., Coal Meas. [Sig. long leaved.]

*magnum*, Wood, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. large.]

*mamillatum* syn. for *L. veltheimianum*.

*mekiston* syn. for *L. modulatum*.

*oculatum* syn. for *L. distans*.

*oweni* syn. for *L. vestitum*.

*politum* syn. for *L. modulatum*.

*quadrangulatum*, Schlotheim, 1821-23, Petrefactenkunde, Coal Meas. [Sig. quadrangular.]

*quadrilateral*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. quadrilateral.]

*rhombicum*, Presl., 1833 (*Bergeria rhombica*), in Sternberg, Flor. d. Vorw., vol. 2, Coal Meas. [Sig. rhombic.]

*rugosum* syn. for *L. dichotomum*.

*scutatum*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. bearing shields.]

*squamiferum*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. scale bearing.]

*tetragonum*, Sternberg, 1821, *Essai d'un expose Geognostico-botanique de la flore du monde primitif*, 2 Cahier, Coal Meas. [Sig. quadrangular.]

*venustum*, syn. for *L. obtusum*.

**LEPIDOPHLOIOS** *ichthyoderma*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. fish skinned.]

*ichthyolepis*, see *Lepidodendron ichthyolepis*.

*sigillarioides*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. like *Sigillaria*.]

**LEPIDOPHYLLUM** *foliaceum* is *Lepidostrobus foliaceus*.

*lanceolatum* is *Lepidostrobus lanceolatus*, and is Brongniart's species 1828, in Prodr. d. Hist. Veg. Foss.

**LEPIDOPHYLLUM** linearifolium, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. having lined leaves.]  
mansfieldi, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
morrisanum, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
trinerve is Brongniart's species, 1828, in Prodr. d. Hist. d. Veg. Foss.  
**LEPIDOSTROBUS** aldrichi, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
foliaceus instead of Lepidophyllum foliaceum.  
goldenbergi, Schimper, 1872, Traite de Palaeontologie Vegetale, vol. 2, p. 61. Coal Meas. [Ety. proper name.]  
hastifolius should be L. hastatus. The mistake is in Geo. Sur., Ill., vol. 2, p. 456.  
incertus, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. uncertain.]  
laoei, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
lanceolatus instead of Lepidophyllum lanceolatum.  
mansfieldi, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
mirabilis, Newberry, 1873 (Polysporia mirabilis), Ohio Pal., vol. 1, Lower Coal Meas. [Sig. extraordinary.]  
praelongus, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. very long.]  
quadratus, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. quadrate.]  
salisburyi, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
spectabilis, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. remarkable.]  
stachyoides, Wood, 1860, Proc. Acad. Nat. Sci., Coal Meas, [Sig. like the plant *Stachys*.]  
**LEPIDOXYLON**, Lesquereux, 1880, Coal Flora of Pa. [Ety. *lepis*, a scale; *xylon*, wood.]  
anomalous, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. anomalous.]  
**LESCUROPTERIS** adiantites instead of Neuropteris adiantites.  
**LESLEYA**, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
grandis, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. grand.]  
**LICROPHYCUS** flabellum, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. a fan.]  
*Lycopodiolithes elegans*, see *Lepidodendron elegans*.  
**LYCOPODITES** cavifolius instead of Selaginites cavifolius.  
ortoni, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
pendulus, Lesquereux, 1880, Coal Flora

of Pa., Coal Meas. [Sig. hanging down.]  
**LYCOPODITES** strictus, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. pressed together.]  
uncinatus instead of Selaginites uncinatus.  
*vanuxemi*, syn. for *Plumalina plumaria*, which is a Graptolite.  
**MACROSTACHYA**, Shimper, 1869, Traite de Palaeontologie Vegetale, vol. 1, p. 332. [Ety. *makros*, long; *Stachys*, a plant.]  
infundibuliformis, Brongniart, 1828 (Equisetum infundibuliforme). Hist. Veg. Foss., Coal Meas. [Sig. funnel shaped.]  
**MEGALOPTERIS** abbreviata, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. abbreviated.]  
fasciculata, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. bundled.]  
marginata, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. margined.]  
southwelli, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
**MEGAPHYTON** goldenbergi, Weiss, 1860, Zeitsch d. deutsch geol. Gesellsch XII., Coal Meas. [Ety. proper name.]  
grandeuryi, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
*Myrianites* is a trail.  
*Nemapodia* is a trail.  
**NEMATOPHYLLUM**, Fontaine & White, 1880, Perm. or Up. Carb. Flora. [Ety. *nema*, thread; *phyllon*, a leaf.]  
angustum, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. narrow.]  
*Nereites* is a trail.  
**NEUROPTERIS** acuminata, Schlotheim, 1820 (Filicites acuminatus), Petref., Coal Meas. [Sig. acuminate.]  
*adiantites* is *Lescuropteris adiantites*.  
agassizi, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
anomala, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. anomalous.]  
aspera, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. rough.]  
biformis, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. two formed.]  
callosa, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. thick skinned.]  
cordato-ovata, Weiss, 1877, Fossile Flora, Coal Meas. [Sig. cordate-ovate.]  
decipiens, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. deceiving.]  
dictyopteroides, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. like *Dictyopteris*.]  
dilatata, Lindley & Hutton, 1835 (Cyclopteris dilatata), Foss. Flora. vol. 2, Coal Meas. [Sig. dilated.]  
elrodi, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
germari, Geppert, 1836 (*Adiantites*

- germari), *Systema Filicum fossilium*, Coal Meas. [Ety. proper name.]
- NEUROPTERIS** *lacininata* instead of *Cyclopteris lacininata*.
- linnaefolia* is a Triassic species.
- missouriensis*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]
- obscura*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. obscure.]
- odontopteroides*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. like *Odontopteris*.]
- platynervis*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. [Sig. flat nerved.]
- smithsi*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]
- subfalcata*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. subfalcate.]
- tenuinervis* is *Odontopteris tenuinervis*.
- NÆGGERATHIA** was described by Sternberg, in 1820, in *Essai d'un expose Geognostico-botanique de la Flore du monde primitif*, 2 Cahier.
- bockschiana* is *Archæopteris bockschiana*.
- minor* is *Archæopteris minor*.
- obliqua*, Lesquereux, is *Archæopteris obliqua*.
- obliqua*, Gœppert is not an American species.
- obtusa* is *Archæopteris obtusa*.
- ODONTOPTERIS** *abbreviata*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. shortened.]
- alpina*, Sternberg, 1821-38 (*Neuropteris alpina*), Versuch einer Geognost.-botan. Darstellung der Flora der Vorwelt., vol. 2, Coal Meas. [Ety. proper name.]
- brardi* is Ad., Brongniart's species, 1822, in Class d. Veg. Foss.
- cornuta*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. horned.]
- crenulata*, as first identified by Lesquereux, see *O. subcrenulata*.
- deformata*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. deformed.]
- densifolia*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Perm. [Sig. dense leaved.]
- lescuri*, Wood, 1866, Trans. Am. Phil. Soc., vol. 13, Coal Meas. [Ety. proper name.]
- nervosa*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Perm. [Sig. full of veins.]
- newberryi*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]
- neuropteroides*, being preoccupied by Roemer, Lesquereux proposed *O. newberryi*, 1880, Coal Flora of Pa.
- pachyderma*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. thick skinned.]
- rotundifolia*, Wood, 1866, Trans. Am. Phil. Soc., vol. 13, Coal Meas. [Sig. round leaved.]
- ODONTOPTERIS** *sphenopteroides*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. like *Sphenopteris*.]
- squamosa*, Dawson, 1881, Quar. Jour. Geo. Soc., Lond., vol. 37, Devonian. [Sig. scaly.]
- subcrenulata*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. somewhat crenulated.]
- tenuinervis*, instead of *Neuropteris tenuinervis*.
- OLIGOCARPIA**, Gœppert, 1841-48, Die Gattungen der fossilen Pflanzen. [Ety. *oligos*, few; *carpus*, fruit.]
- alabamensis*, Lesquereux, 1875, Geol. Rep. Ala., Coal Meas. [Ety. proper name.]
- flagellaris* instead of *Sphenopteris flagellaris*.
- gutbieri*, Gœppert, 1841-48, Die Gattungen der fossilen Pflanzen, Coal Meas. [Ety. proper name.]
- PALÆOCHORDA** *prima*, Whitfield, 1877, Rep. on the Pal. of the Black Hills, Potsdam Gr. [Sig. first.]
- PALÆOPHYCUS** *plumosum*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Potsdam Gr. [Sig. feathered.]
- occidentale*, Whitfield, 1877, Rep. on the Pal. of the Black Hills, Potsdam Gr. [Sig. western.]
- PALÆOXYRIS** *appendiculata* is *Spirangium appendiculatum*.
- corrugata* is *Spirangium corrugatum*.
- prendeli* is *Spirangium prendeli*.
- Palmacites oculatus*, see *Sigillaria oculata*.
- næggerathi*, see *Trigonocarpum næggerathi*.
- PECOPTERIS** *angustipinna*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. having narrow pinnae.]
- arborescens* is Schlotheim's species, 1820 (*Filicites arborescens*) Petref.
- arguta* is Sternberg's species in Tent. Flor. Primord.
- aspera*, Brongniart, 1828, Prodr. d. Veg. Foss., Coal Meas. [Sig. rough.]
- asplenoides*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. like *Asplenium*.]
- bullata* is a Triassic species.
- clarki*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]
- clintoni*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]
- elliptica*, Fontaine & White (*Goniopteris elliptica*). The name was preoccupied.
- germari*, Weiss, 1869-72 (*Cyatheites germari*), Foss. Flora d. Jungsten Steink. Form., Up. Coal Meas. or Permian. [Ety. proper name.]
- germari* var. *crassinervis*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. thick nerved.]
- germari* var. *cuspidata*, Fontaine &

White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. toothed.]

**PECOPTERIS** goniopteroides, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. like *Goniopteris*.]

*halli* instead of *Alethopteris*, *halli*.

*heerana*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Ety. proper name.]

*imbricata*, Fontaine & White, Perm. or Up. Carb. Flora, Coal Meas. [Sig. imbricated.]

*inclinata*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. [Sig. inclined.]

*lanceolata*, Lesquereux, instead of *Alethopteris lanceolata*.

*lanceolata*, Fontaine & White. The name was preoccupied.

*latifolia*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. [Sig. wide leaved.]

*lyratifolia*, Gœppert, 1841-48 (*Sphenopteris lyratifolia*), *Die Gattungen d. Foss. Pflanzen*, Coal Meas. [Sig. having lyre-shaped leaves.]

*marginata*, see *Alethopteris marginata*.

*merianopteroides*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. like *Merianopteris*.]

*microphylla*, Brongniart, 1828, *Prodr. d. Hist. Veg. Foss.*, Coal Meas. [Sig. small leaved.]

*miltoni*, Artis, 1825 (*Filicites miltoni*), *Anted. Phytol.*, Coal Meas. [Ety. proper name.]

*murrayana* is identified by Lesquereux, *Geo. Sur.*, III, vol. 2, see *Sphenopteris pseudo-murrayana*.

*newberryana*, Fontaine & White, 1880 (*Goniopteris newberryana*), Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Ety. proper name.]

*newberryi*, refer to *Pseudopecopteris newberryi*.

*nodosa*, Gœppert, 1836 (*Aspidites nodosus*), *Systema Filicum Fossilium*, Upper Coal Meas. [Sig. nodose.]

*oblonga*, Fontaine & White, 1880 (*Goniopteris oblonga*), Perm. or Up. Carb. Flora, Coal Meas. or Perm. [Sig. oblong.]

*ovoides*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. somewhat ovoid.]

*pachypteroides*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. like *Pachypteris*.]

*platynervis*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. flat nerved.]

*platyrachis*, Brongniart, 1828, *Prodr. d. Hist. d. Veg. Foss.*, Coal Meas. [Sig. having a flat rachis.]

*PECOPTERIS plumosa* is Artis' species (*Filicites plumosa*), 1825, *Anted. Phytol.* pteroides instead of *Alethopteris pteroides*.

*pusilla* is *Pseudopecopteris pusilla*.

*quadratifolia*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. quadrately leaved.]

*rarinervis*, Fontaine & White, 1880, Permian or Up. Carb. Flora, Coal Meas. or Permian. [Sig. rare veined.]

*robusta*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. robust.]

*rotundifolia*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. round leaved.]

*rotundiloba*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. round lobed.]

*schimperana*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Ety. proper name.]

*serpillifolia*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. thyme leaved.]

*serrula*, Lesquereux, instead of *Alethopteris serrula*.

*shæfferi* is *Pseudopecopteris shæfferi*.

*sillimani* is *Pseudopecopteris sillimani*. *solida* instead of *Alethopteris solida*.

*stellata* instead of *Alethopteris stellata*.

*subfalcata*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. somewhat falcate.]

*tenuinervis*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. fine veined.]

*venulosa*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. full of small veins.]

*vestita*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. clothed.]

*Physophycus marginatus* is *Taonurus marginatus*.

*Phytolithus cancellatus* is *Lepidodendron veltheimianum*.

*Polyporites mirabilis* is a mistake and may be erased.

*polysporus* is a mistake and may be erased.

*Polyspora* is a syn. for *Lepidostrobus*.

*mirabilis* is *Lepidostrobus mirabilis*.

**PROTOBLECHNUM**, Lesquereux, 1880, Coal Flora of Pa. [Ety. *protos*, first; *Blechnum*, a genus.]

*holdeni* instead of *Alethopteris holdeni*.

**PROTOSTIGMA**, Lesquereux, 1877, *Proc. Am. Phil. Soc.* [Sig. *protos*, first; *stigma*, a brand or dot.]

*sigillarioides*, Lesquereux, 1877, *Proc. Am. Phil. Soc.*, Hud. Riv. Gr. [Sig. like *Sigillaria*.]

**PSEUDOPECOPTERIS**, Lesquereux, 1880, Coal Flora of Pa. [Ety. *pseudos*, false; *Pecopteris*, a genus.]

*abbreviata* instead of *Sphenopteris abbreviata*.

*acuta* instead of *Sphenopteris acuta*,

*PSEUDOPECOPTERIS* anceps, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. double.]  
*callosa* instead of *Pecopteris callosa*.  
*cordato-ovata*, Weiss, 1869-22 (*Neuropteris cordata-ovata*), Foss. Flor. d. jungst. steink. form., Coal Meas. [Sig. cordate ovate.]  
*decipiens* instead of *Sphenopteris decipiens*.  
*decurrens* instead of *Pecopteris decurrens*, Lesquereux.  
*denudata*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. denuded.]  
*dimorpha*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. two-formed.]  
*glandulosa* instead of *Sphenopteris glandulosa*.  
*hymenophylloides* instead of *Alethopteris hymenophylloides*.  
*irregularis* instead of *Sphenopteris irregularis*.  
*latifolia* instead of *Sphenopteris latifolia*.  
*macilentata* instead of *Sphenopteris macilentata*.  
*mazonana* instead of *Alethopteris mazonana*.  
*muricata* instead of *Alethopteris muricata*.  
*nervosa* instead of *Alethopteris nervosa*.  
*newberryi* instead of *Sphenopteris newberryi*.  
*pluckeneti* instead of *Alethopteris pluckeneti*.  
*polyphylla* instead of *Sphenopteris polyphylla*.  
*pusilla* instead of *Pecopteris pusilla*.  
*shæfferi* instead of *Pecopteris shæfferi*.  
*sillimani* instead of *Pecopteris sillimani*.  
*speciosa*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. beautiful.]  
*spinulosa* instead of *Alethopteris spinulosa*.  
*subcrenulata*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. somewhat crenulated.]  
*subnervosa* Rømer, F. A., 1860, Palæontographica, vol. 9. Coal Meas. [Sig. somewhat veiny.]  
*trifoliata* instead of *Sphenopteris trifoliata*, and credit to Artis, 1825 (*Filicites trifolius*) Anted. Phytol.  
*virginiana* instead of *Cyclopteris virginiana*.  
*PSILOPHYTON* cornutum, Lesquereux, 1877, Proc. Am. Phil. Soc., Low, Held. Gr. [Sig. horned.]  
*gracillimum*, see *Dendrograptus gracillimus*.  
*princeps*, var. *ornatum*, Dawson, 1871, Foss. Plants, Devonian. [Sig. ornate.]  
*Ptilocarpus bicornutus*, see *Cardiocarpon bicornutum*.  
*Ptilophyton*, Dawson, 1878, Scottish Devonian Plants. [Ety. *ptilon*, a wing; *phyton*, a plant.] This name is proposed for *Lycopodites vanuxemi*, which is *Plumalina plumaria*, and *L. plumu-*

*la*. If the types are not Graptolites, the genus may stand.

*RHABDOCARPUS apiculatus*, syn. for *R. carinatus*.  
*costatus*, syn. for *R. acuminatus*.  
*cornutus*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. horned.]  
*howardi*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
*insignis*, Lesquereux, 1880. The name having been preoccupied by Dawson, see *R. lescuriana*.  
*jacksonensis* instead of *Carpolithes jacksonensis*.  
*lescurianus*, n. sp. Coal Meas. Proposed instead of *R. insignis*, Lesquereux, 1880, Coal Flora of Pa., p. 575, pl. 85, fig. 26.  
*mammillatus* is *Cardiocarpon mammillatum*.  
*multistriatus* instead of *Carpolithes multistriatus*.  
*oblongus*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Perm. [Sig. oblong.]  
*platimarginatus* instead of *Carpolithes platimarginatus*.  
*RHACHIOPTERIS affinis* instead of *Stigmarioides affinis*.  
*selago* instead of *Stigmarioides selago*.  
*RHACOPHYLLUM adnascens* instead of *Hymenophyllites adnascens*.  
*arborescens* instead of *Hymenophyllites arborescens*.  
*clarki* instead of *Hymenophyllites clarki*.  
*cornutum*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. horned.]  
*corallum*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. a coral.]  
*expansum*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. expanded.]  
*filiciforme*, Gutbier, 1842 (*Fucoides filiciformis*) Abdr. u. Verst. d. zwick-aur schwarzk. u. sein. Ungeb., Coal Meas. [Sig. fern like.]  
*flabellatum*, Sternberg, 1821-38 (*Aphlebia flabellata*), Flora der Vorwelt, vol. 2, Coal Meas. [Sig. fan like.]  
*fucoides*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. fucus like.]  
*hamulosum*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. full of hooks.]  
*inflatum* instead of *Hymenophyllites inflatus*.  
*irregulare*, Germar, 1844 (*Aphlebia irregularis*), Verst. d. Steink. v. Wettin u. Löbejün, Coal Meas. [Sig. irregular.]  
*laciniatum*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. jagged.]  
*membranaceum*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. membranaceous.]  
*molle*, instead of *Hymenophyllites mollis*.



- RHACOPHYLLUM** scolopendrites instead of Scolopendrites dentatus.  
 spinosum, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. full of spines.]  
 strongi instead of Hymenophyllites strongi.  
 thalliforme instead of Hymenophyllites thalliformis.  
 trichoideum, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. hair-like.]  
 truncatum, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. truncated.]
- RHIZOMORPHA** SIGILLARIA, Lesquereux, 1877, Proc. Am. Phil. Soc., Coal Meas. [Sig. of Sigillaria.]
- RUSOPHYCUS** ASPERUM, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Utica Slate. [Sig. rough.]
- SAPORTEA**, Fontaine & White, 1880, Perm. or Up. Carb. Flora. [Ety. proper name.]  
 grandifolia, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. large leaved.]  
 salisburioides, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. like Salisburia.]
- SCHUTZIA** bracteata refer to Cordaianthus bracteatus.  
*Scolithus* has no place among the plants. It represents the work of a borer, and is referred therefore to the Annelida.  
*Scolopendrites dentatus* is Rhacophyllum scolopendrites.
- Selaginites cavifolius* is Lycopodites cavifolius.  
 crassus is a syn. for Lycopodites cavifolius.  
 formosus is not a plant. It was founded upon fragments of a crustacean.  
 uncinatus is Lycopodites uncinatus.
- SIGILLARIA** acuminata, Newberry, 1874, Proc. Cleveland Acad. Sci., Coal Meas. [Sig. pointed.]  
 alveolaris is Sternberg's species (Lepidodendron alveolare), 1820 in essai d'un expose Geognostico-botanique de la Flore du monde primitif. 1st cahier.  
 approximata, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. near to.]  
 biercei, syn. for S. ichthyolepis.  
 brardi was described in 1822. Class d. Veg. Foss.  
 brongniarti, Geinitz, 1855. Die Verst. d. Steink. form. Sachsen, Coal Meas. [Ety. proper name]  
 cancellata, syn. for Lepidodendron veltheimianum.  
 chemungensis is Lepidodendron chemungense.  
 cortei, Brongniart, 1828, Prodr. d. Hist. d. Veg. Foss., Coal Meas. [Ety. proper name.]  
 cuspidata, Brongniart, 1828, Prodr. d. Hist. d. Veg. Foss., Coal Meas. [Sig. pointed.]
- SIGILLARIA** dentata, Newberry, 1874, Proc. Cleveland Acad. Sci., Coal Meas. [Sig. toothed.]  
 elegans is Sternberg's species (Favularia elegans) in Tent. flor. primord.  
 hexagona, Schlotheim, 1820 (Palmacites hexagonatus), Petref., Coal Meas. [Sig. hexagonal.]  
 ichthyolepis, Sternberg, 1821-38, Flor. d. Vorw., Coal Meas. [Sig. fish-scaled.]  
 lacei, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
 leioderma, Brongniart, 1828-44, Hist. d. Veg. Foss., Coal Meas. [Sig. smooth skinned.]  
 leptoderma, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. thin skinned.]  
 lorenzi, Lesquereux, 1-80, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
 mammillaris, Brongniart, 1828-44, Hist. d. Veg. Foss. Coal Meas. [Sig. mamillated.]  
 marginata, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. margined.]  
 marineria, Hildreth, 1837, Am Jour. Sci. & Arts, vol. 31, Low. Coal Meas. [Ety. proper name.]  
 martini may be erased.  
 oculata is Schlotheim's species (Palmacites oculatus), 1820, Petref.  
 orbicularis, Brongniart, 1828, Prodr. d. Hist. d. Veg. Foss., Coal Meas. [Sig. orbicular.]  
 ornithioides, Wood, 1866, Trans. Am. Phil. Soc., vol. 13, Coal Meas. [Sig. like bird tracks.]  
 ovalis, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. oval.]  
 oweni, see Didymophyllum oweni.  
 perplexa, Wood, 1866, Trans. Am. Phil. Soc., vol. 13, Coal Meas. [Sig. perplexing.]  
 pittstonana, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
 pulchra, Newberry, 1874, Proc. Cleveland Acad. Sci., Coal Meas. [Sig. beautiful.]  
 reticulata, Steinhaur, may be erased and reticulata, Lesquereux, restored.  
 solanus, Wood, 1860, Proc. Acad. Nat. Sci., Coal Meas [solanus, in text; solenotus, on plate; solena, in Trans. Am. Phil. Soc., vol. 13.]  
 tessellata, Steinhaur, is correct, but tessellata. Brongniart, may be struck out as he did not claim the name.  
 voltzi, Brongniart, 1828, Prodr. d. Hist. d. Veg. Foss., Coal Meas. [Ety. proper name.]  
 williamsi, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name]  
 yardleyi was described by Lesquereux, in 1858, in Catal. Potts. Foss.

- SIGILLARIOIDES stellatus*, refer to *Stigmaria stellata*.
- SOLENOULA*, Wood, 1860, Proc. Acad. Nat. Sci., vol. 2. [Ety. *solen*, a channel; *oulos*, entire.]
- psilophleus*, Wood, 1860, Proc. Acad. Nat. Sci., Coal. Meas. [Sig. smooth barked.]
- SOROCLADUS*, Lesquereux, 1880, Coal Flora of Pa. [Ety. *soros*, a heap, one of the fruit dots on the back of the frond; *klado*, to break in pieces.]
- asteroides* instead of *Staphylopteris asteroides*.
- ophioglossoides*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. like *Ophioglossus*.]
- sagittatus* instead of *Staphylopteris sagittata*.
- stellatus* instead of *Staphylopteris stellata*.
- wortheni* instead of *Staphylopteris wortheni*.
- SPHENOPHYLLUM densifoliatum*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. dense leaved.]
- fontainianum*, n. sp., Upper Coal Meas. or Permian. Proposed instead of *S. latifolium* of Fontaine & White, in Perm. or Up. Carb. Flora, p. 36, pl. 1, figs. 10 & 11.
- latifolium*, Wood, 1866, Trans. Am. Phil. Soc., vol. 13, Coal Meas. [Sig. wide leaved.]
- latifolium*, Fontaine & White, 1880, Perm. or Up. Carb. Flora. The name was preoccupied. See *S. fontainianum*.
- primævum*, Lesquereux, 1877, Proc. Am. Phil. Soc., Hud. Riv. Gr. I think there is no probability that this is a plant.
- tenuifolium*, Fontaine & White, 1880, Perm. or Up. Carb. Flora. Coal Meas. or Permian. [Sig. slender leaved.]
- SPHENOPTERIS abbreviata*, refer to *Pseudopecopteris abbreviata*.
- acrocarpa*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. pointed fruit.]
- acuta*, refer to *Pseudopecopteris acuta*.
- alabamensis*, refer to *Oligocarpia alabamensis*.
- auriculata*, Fontaine & White, 1880, Perm. or Up. Carb. Flora. Coal Meas. or Permian. [Sig. auriculated.]
- ballantini* instead of *Hymenophyllites ballantini*.
- britsi*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]
- charophylloides* instead of *Pecopteris charophylloides*.
- coriacea*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. coriaceous.]
- eristata*, Sternberg, 1821-33, Flor. d. Vorw., vol. 2, Coal Meas. [Sig. tufted.]
- decipiens*, refer to *Pseudopecopteris decipiens*.
- SPHENOPTERIS dentata*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. toothed.]
- flaccida*, Crepin, 1874, Bull. Acad. Roy. of Belgium, Sub-carboniferous. [Sig. flaccid.]
- flagellaris* refer to *Oligocarpia flagellaris*.
- flexicaulis* instead of *Hymenophyllites flexicaulis*.
- foliosa*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. leafy.]
- furcata* instead of *Hymenophyllites furcatus*
- glandulosa*, refer to *Pseudopecopteris glandulosa*.
- goniopteroides*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. like *Goniopteris*.]
- hastata*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. armed with a spear.]
- hildrethi* instead of *Hymenophyllites hildrethi*.
- intermedia*, Lesquereux, The name was preoccupied in 1852 by Ettingshausen. It is now described as *S. mediana*.
- irregularis*, refer to *Pseudopecopteris irregularis*.
- larischi*, Stur, 1877 (Calymmotheca *larischi*), Culm. Flor. d. Ostr. u. Waldenburger Schichten, Coal Meas. [Ety. proper name.]
- latifolia*, refer to *Pseudopecopteris latifolia*.
- laxa*, Hall, is *Archæopteris hallana*.
- lescuriana*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Ety. proper name.]
- linearis*, Sternberg, Tent. flor. prim. p. 15, tab. 42, fig. 4, Lower Coal Meas. [Sig. lined.]
- macilenta*, refer to *Pseudopecopteris macilenta*.
- mediana*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. middle.] Proposed instead of *S. intermedia*.
- microcarpa*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. small fruited.]
- minutisetia*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. finely marked.]
- newberryi* refer to *Pseudopecopteris newberryi*.
- pachynervis*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Sig. thick veined.]
- pilosa*, refer to *Callipteris pilosa*.
- polyphylla*, refer to *Pseudopecopteris polyphylla*.
- pseudomurrayana*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. from its resemblance to *Pecopteris murrayana*.]
- pterota*, Wood, 1866, Trans. Am. Phil.

- Soc., vol. 13, Coal Meas. [Sig. feathered.]
- SPHENOPTERIS** *quercifolia*, Gœppert, 1836, Systema Filicum fossilium, Coal Meas. [Sig. oak leaved.]
- spinosa* instead of *Hymenophyllites spinosus*.
- squamosa* is *Pseudoplectopteris anceps*.
- subalata*, Weiss, 1869-72, Foss. Flor. d. jungst. Steink. form., Coal Meas. [Sig. somewhat alate.]
- trichomanoides* instead of *Hymenophyllites trichomanoides*.
- tridactylites* instead of *Hymenophyllites tridactylites*.
- trifoliata*, refer to *Pseudoplectopteris trifoliata* and to *Artis* (*Filicites trifoliatus*), 1825, Antediluvian Phytology.
- SPIRANGIUM**, Schimper, 1874, Traite de Palæontologie Vegetale. [Ety. from the coiled and twisted marking around the pod or vegetable substance.]
- appendiculatum* instead of *Palæoxyris appendiculata*.
- corrugatum* instead of *Palæoxyris corrugata*.
- intermedium*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. intermediate.]
- multiplicatum*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. many plicated.]
- prendeli* instead of *Palæoxyris prendeli*.
- Spirophyton*, Hall, is classed by Prof. Lesquereux as a synonym for *Taonurus*.
- SPORANGITES** *acuminatus* instead of *Annularia acuminata*.
- huronensis*, Dawson, 1871, Am. Jour. Sci. & Arts, Ham. Gr. [Ety. proper name.]
- SPOROCYSTIS**, Lesquereux, 1880, Coal Flora of Pa. [Ety. *sporos*, seed; *kustis*, bladder.]
- planus*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. even.]
- STAPHYLOPTERIS** *asteroides*, *S. sagittata*, *S. stellata*, and *S. wortheni*, are referred to the genus *Sorocladus*.
- STEMMATOPTERIS**, Corda, 1845, Beitrage zur Flora der Vorwelt. [Ety. *stemma*, a wreath; *pterus*, a fern.]
- angustata*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. narrowed.]
- cyclostigma*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. round dotted.]
- emarginata*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. emarginated.]
- gigantea*, instead of *Caulopteris gigantea*.
- hirsuta*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. hairy.]
- insignis*, instead of *Caulopteris insignis*.
- mimica*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. mimic.]
- STEMMATOPTERIS** *polita*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. polished.]
- punctata*, instead of *Caulopteris punctata*.
- schimperii*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]
- squamosa*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. scaly.]
- wortheni*, instead of *Caulopteris wortheni*.
- STIGMARIA** *amœna*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. charming.]
- stellaris* instead of *Sigillarioides stellaris*.
- STIGMARIOIDES** *affinis*, refer to *Rhachiopteris affinis*.
- selago*, refer to *Rhachiopteris selago*.
- Strobilus caryophyllus*, Hildreth, 1837, Am. Jour. Sci. & Arts, vol. 31, Coal Meas.
- SYRINGODENDRON** was described by Sternberg in 1820 in Essai d'un expose Geognostico-botanique de la Flore du monde primitif. 1st cahier, and *S. pes-capreoli* was also described.
- brongniarti*, Geinitz, 1855 (*Sigillaria brongniarti*), Verst. d. Steink. form. in Sachsen, Coal Meas. [Ety. proper name.]
- gracile* is from the Waverly Group.
- kirtlandium*, Hildreth, 1837, Am. Jour. Sci. & Arts, vol. 31, Coal Meas. [Ety. proper name.]
- magnificum*, Wood, 1866, Trans. Am. Phil. Soc., vol. 13, Coal Meas. [Sig. magnificent.]
- pachyderma* instead of *Sigillaria pachyderma*.
- TÆNIOPHYLLUM**, Lesquereux, 1878, Proc. Am. Phil. Soc. [Ety. *tainia*, a ribbon; *phyllon*, a leaf.]
- contextum*, Lesquereux, 1878, Proc. Am. Phil. Soc., Coal Meas. [Sig. entwined.]
- decurrens*, Lesquereux, 1878, Proc. Am. Phil. Soc., Coal Meas. [Sig. extending downward.]
- deflexum*, Lesquereux, 1878, Proc. Am. Phil. Soc., Coal Meas. [Sig. bent downward.]
- TÆNIOPTERIS** *lescuriana*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Ety. proper name.]
- magnifolia* is a Jurassic species.
- newberryana*, Fontaine & White, 1880, Perm. or Up. Carb. Flora, Coal Meas. or Permian. [Ety. proper name.]
- smithi*, Lesquereux, 1875, Geol. Rep. of Ala., Coal Meas. [Ety. proper name.]
- TAONURUS**, Fisher-Ooster, 1858, Foss. Fucoïden d. Schweizer Alpen. [Ety. *taon*, a peacock; *oura*, tail.]
- cauda-galli* instead of *Spirophyton cauda-galli*, according to Lesquereux.
- colletti* instead of *Chondrites colletti*.

- TAONURUS** crassus instead of Spirophyton crassum.  
marginatus instead of Caulerpites marginatus.  
typus instead of Spirophyton typus.  
velum instead of Spirophyton velum.
- TRICHOPHYCUS**, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1. [Ety. *trichos*, hair; *phukos*, sea weed.]  
lanosum, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. woolly.]  
sulcatum, Miller & Dyer, 1878, Cont. to Pal., No. 2, Hud. Riv. Gr. [Sig. furrowed.]  
venosum, S. A. Miller, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. veiny.]
- TRIGONOCARPUM** giffordii, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]  
*noeggerathi* is Sternberg's species (*Palma-cites noeggerathi*), Tent. flor. primord.  
*saffordii*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Ety. proper name.]
- TRIPHYLLOPTERIS**, Schimper, 1874, Traite de Pal. Veg. [Ety. *tria*, three; *phyllon*, a leaf; *pterus*, a fern.]  
*lesciana* instead of *Cyclopteris lesciana*.
- Trochophyllum* was used by Edwards & Haime for a genus of Corals in 1851, and hence was preoccupied before Wood suggested its use instead of *Annularia*.  
*clavatum*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. knotted.]  
*lineare*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. linear.]
- ULODENDRON** commutatum, Schimper, 1874, Traite de Pal. Veg., Coal Meas. [Sig. changed.]  
*flexuosum*, see *Haloniea flexuosa*.  
*Uphantania* is referred to the Class Porifera.
- WALCHIA** gracilis was published in 1863, Can. Nat., vol. 8, and is the same as *Araucarites gracilis*. *W. robusta* in 1871, in Rep. on Prince Edward's Island.
- WHITTLESEYA** was described as well as *W. elegans*, in 1874, in Proc. Cleveland Acad. Nat. Sci.  
*integrifolia*, Lesquereux, 1830, Coal Flora of Pa., Coal Meas. [Sig. whole leaved.]  
*undulata*, Lesquereux, 1880, Coal Flora of Pa., Coal Meas. [Sig. undulated.]
- ZAMITES** *gramineus* and *Z. obtusifolius* are Triassic species.

## ANIMAL KINGDOM.

### SUBKINGDOM PROTISTA.

- ARCHÆOCYATHELLUS**, Ford, 1873, Am. Jour. Sci. & Arts, 3d ser., vol. 6. A proposed subgenus of *Archæocyathus*, founded upon *A. rensselaëricus*.
- ASTROCONIA**, Sollas 1881, Lond. Quar. Jour. Geo. Soc., vol. 37. [Ety. *aster*, a star; *konia*, dust.]  
*granti*, Sollas, 1881, Lond. Quar. Jour. Geo. Soc., vol. 37, Niagara Gr. [Ety. proper name.]
- ASTYLOSPONGIA**, *præmorsa*, var. *nuxmoschata*, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. nutmeg.]
- BEATRICEA** (p. 165) is a sponge, and should have been placed in this subkingdom.
- CALCARINA**, D'Orbigny, 1826, Tableau Methodique de la classe des Cephalopodes in Annales des Sciences Naturelles, Tome 7. [Ety. *calcis*, limestone.]  
*ambigua*, Brady, 1876, Monograph of Carboniferous and Permian foraminifera, Carboniferous. [Sig. ambiguous.]
- CALCISPHERA**, Williamson, 1880, Mem. Org. of the Plants of the Coal Meas., pt. 10. [Ety. *calcis*, limestone; *sphæra*, a sphere.]  
*robusta*, Williamson, 1880, Mem. Org. Plants, Coal Meas., Corniferous Gr. [Sig. robust.]
- CYATHOPHYCUS**, Walcott, 1879, Trans. Alb. Inst., vol. 10. [Ety. *kuathos*, a cup; *phukos*, a sea weed.] This genus is now supposed to represent sponges.  
*reticulatum*, Walcott, 1879, Trans. Alb. Inst., vol. 10, Utica Slate Gr. [Sig. reticulated.]  
*subsphericum*, Walcott, 1879, Trans. Alb. Inst., vol. 10, Utica Slate Gr. [Sig. somewhat spherical.]
- CYATHOSPONGIA**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr. [Ety. *kuathos*, a cup; *spongia*, a sponge.]  
*excrecens*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. growing up preternaturally.]
- DICTYOPHYTON** catilliforme, Whitfield, 1881, Bull. No. 1, Am. Mus. Nat. Hist., Keokuk Gr. [Sig. dish like.]  
*cylindricum*, Whitfield, 1881, Bull. No. 1, Am. Mus. Nat. Hist., Keokuk Gr. [Sig. cylindrical.]
- DYSTACTOSPONGIA**, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. [Ety. *dystaktos*, hard to arrange; *spongia*, a sponge.]

**DYSTACTOSPONGIA** insolens, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. unusual.]

**ENDOTHYRA**, Phillips, 1845, Proc. Geol. & Polytech. Soc. W. Riding Yorks, vol. 2. [Ety. *endos*, within; *thura*, a door.]  
baileyi instead of *Rotalia baileyi*.

**FUSILINA** hyperborea, Salter, 1855, Belcher's last Arctic Voyage, vol. 2, Carboniferous. [Sig. very far north.]

**HINDSIA**, Duncan, 1879, Ann. & Mag. Nat. Hist., 5th ser., vol. 4. [Ety. proper name.]

sphæroidalis, Duncan, 1879, Ann. & Mag. Nat. Hist., 5th ser., vol. 4, Low. Held. Gr. [Sig. sphæroidal.]

*Ischadites tessellatus* see *Receptaculites tessellatus*.

**LEPIDOLITES**, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2. [Ety. *lepis*, scale; *lithos*, stone.]

dickhauti, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Ety. proper name.] Another specimen he called *L. elongatus*, without characters to distinguish it. The Specimens are very poor, and unless they are spongioid and related to *Cyathophycus*, the name may as well be erased for want of definition.

**LOFTUSIA**, Carpenter & Brady, 1869, Trans. Royal Soc. [Ety. proper name.]

columbiana, Dawson, 1879, Quar. Jour. Geo. Soc., vol. 35, Up. Carb. [Ety. proper name.]

**MICROSPONGIA**, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1. [Ety. *mikros*, small; *spongia*, a sponge.]

gregaria, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. belonging to a flock.]

**NODOSINELLA**, Brady, 1876, Monograph, Carb. & Perm. foraminifera. [Ety. *nodus*, a knot.]

priscilla instead of *Dentalina priscilla*.

**PALEACIS** cuneiformis, Milne-Edwards, 1860, Hist. Nat. d. Corollaires, vol. 3, Warsaw Gr. [Sig. wedge formed.]

*cuneatus* is a syn. for *P. cuneiformis*, and *P. compressus* and *P. enormis*, should be dated 1860.

**PALEOMANON** cratera should be referred to the Niagara Gr.

**PATTERSONIA**, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. [Ety. proper name.]

difficilis, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. difficult.]

**PROTOCYATHUS**, Ford, 1878, Am. Jour. Sci. & Arts, 3d ser., vol. 15. [Ety. *protos*, first; *kuathos*, a cup.]

rarus, Ford, 1878, Am. Jour. Sci. & Arts, 3d ser., vol. 15, Low. Potsdam Gr. [Sig. rare.]

**RECEPTACULITES** arcticus, Etheridge, 1878, Quar. Jour. Geo. Soc., vol. 34, Silurian. [Sig. arctic.]

circularis, Emmons, 1856, Am. Geol., Hud. Riv. Gr. [Sig. circular.]

devonicus, Whitfield, 1882, Desc. new species Foss. from Ohio, Up. Held. Gr. [Sig. Devonian.]

iowensis, should be referred to the Trenton Gr.

sacculus, Hall, 1879, Desc. new species Foss. from Waldron, Ind., Niagara Gr. [Sig. a little bag.]

tessellatus, Winchell & Marcy, 1865, Mem. Bost. Soc. Nat. Hist., vol. 1, Niagara Gr. [Sig. checkered.]

*Rotalia baileyi* refer to *Endothyra baileyi*.

**SACCAMMINA**, Sars, 1868, Vidensk-Selsk. Förhandl. [Ety. diminutive of *sakkos*, a bag.]

eriana, Dawson, 1881, Can. Nat., vol. 10, syn. for *Calcisphæra robusta*.

**STROMATOCERIUM** richmondense, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Ety. proper name.]

**STROMATOPORA** should be referred to this subkingdom. In 1867, Proc. Am. Ass. Ad. Sci., Winchell proposed the subgenus *Cænostroma* to include *S. monticulifera*, *S. polymorpha*, *S. pustulosa*, *S. radiosa*, and *S. ramosa*; and the subgenus *Idiostroma* to include *S. cæspitosa*, and a proposed species *S. gordiaceum*.

hindi is from the Niagara Gr.

nulliporoides, Nicholson, 1875, Pal. Prov. Ont., Ham. Gr. [Sig. like *Nullipora*.]

*Textilaria palæotrochus* see *Valvulina palæotrochus*.

**UPHANTÆNA**, dawsoni, Whitfield, 1881, Am. Jour. Sci. & Arts; also, Bull. No. 1, Am. Mus. Nat. Hist., Keokuk Gr. [Ety. proper name.]

**VALVULINA**, D'Orbigny, 1826, Tabl. Method, d. l. Classe d. Cephalopodes. [Ety. *valva*, a door.]

bulloides, Brady, 1876, Monog. Carb. & Perm. foraminifera, Carboniferous. [Sig. like a bubble.]

decurrens, Brady, 1878, Mem. Geo. Sur. Scotland, Carboniferous. [Sig. extending down.]

palæotrochus, Ehrenberg, 1857 (*Textilaria palæotrochus*), Mikrogeologie, Carboniferous. [Sig. ancient *Trochus*.]

plicata, Brady, 1873, Mem. Geo. Sur. Scotland, Carboniferous. [Sig. plicated.]

rudis, Brady, 1876, Monog. Carb. & Perm. foraminifera, Carboniferous. [Sig. rude.]

## SUBKINGDOM RADIATA.

## CLASS POLYPI.

- ACANTHOGRAPTUS, Spencer, 1878, Can. Nat. vol. 8. [Ety. *akantha*, spine; *grapho*, to write.]  
*granti*, Spencer, 1878, Can. Nat., vol. 8, Niagara Gr. [Ety. proper name.]
- ACERVULARIA adjunctive, White, 1880, Proc. U. S. Nat. Mus., vol. 2, Carboniferous. [Sig. joined.]  
*pentagona*, Goldfuss, 1826 (Cyathophyllum pentagonum), Petref. Germ., Devonian. [Sig. pentagonal.]
- ACROPHYLLUM clarki, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Upper Devonian. [Ety. proper name.]  
*ellipticum*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Lower Devonian. [Sig. elliptical].
- ALVEOLITES arctica, Woodward, 1879, Lond. Geo. Mag. n. s. vol. 5, Devonian. [Sig. arctic.]  
*constans*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Lower Devonian. [Sig. regular, unchangeable.]  
*exsul*, refer to Callopora exsul.  
*fibrosus*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. fibrous.]  
*fischeri* (which is Pachypora fischeri), A. goldfussi, and A. roemeri, should be dated 1860, Can. Jour. vol. 5, and are from Ham. Gr.  
*frondosus*, refer to Pachypora frondosa.  
*irregularis*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Hud. Riv. Gr. [Sig. irregular.]  
*louisvillensis*, Davis (In press) Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Ety. proper name.]  
*minimus*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Lower Devonian. [Sig. smallest.]  
*mordax*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Lower Devonian. [Sig. rough as a rasp.]  
*multilamella*, Meek, 1877, U. S. Geo. Sur., 40th Parallel, vol. 4, Devonian. [Sig. having many lamellæ.]  
*niagarensis*, Nicholson & Hinde, 1874, Can. Jour., Niagara Gr. [Ety. proper name.]  
*niagarensis*, Rominger, see Alveolites undosus.  
*scandularis*, Davis (In press), Foss. Corals of Ky., in vol. 1 Pal. Ky. St. Geo. Sur., Upper Devonian. [Sig. covered as with shingles.]
- ALVEOLITES undosus, n. sp., Niag. Gr. [Sig. wavy.] This name is proposed for the species described by Rominger in 1876, in his Foss. Corals, p. 40, pl. 16, figs. 1 and 2, under the name of A. niagarensis, as his name was preoccupied by Nicholson & Hinde.
- AMPLEXUS annulatus, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Sig. annulated.]  
*feildeni*, Etheridge, 1878, Quar. Jour. Geo. Soc. vol. 34, Upper Silurian. [Ety. proper name.]  
*fenestratus*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Sig. having open windows.]  
*junctus*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. joined.]  
*laxatus*, Billings, Can. Nat. Corniferous (?) limestone. [Sig. spread out.]  
*uniformis*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. uniform.]
- ANISOPHYLLUM, Edwards and Haime, 1851, Mon. d. Pol. foss. d. Terr. Pal. [Ety. *anisos*, unequal; *phyllon*, a leaf.]  
*agassizi*, Edwards & Haime, 1851, Mon. d. Pol. foss. d. Terr. Pal., Low. Held. Gr. [Ety. proper name.]  
*bilamellatum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. having two lamellæ.]  
*trifurcatum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. three forked.]  
*unilargum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. one large.]
- ARACHNOPHYLLUM, Dana, 1848, Zoophytes, U. S. Expl. Exped., vol. 8. [Ety. *arachne*, a spider; *phyllon*, a leaf.]  
*richardsoni*, Salter, 1852, Sutherland's Jour., vol. 2, Upper Sil. [Ety. proper name.]  
*Astraea hennahi*, see Smithia hennahi.
- ASTRÆOPHYLLUM, Nicholson & Hinde, 1874, Can. Jour., vol. 14. [Ety. *aster*, a star; *phyllon*, a leaf.]  
*gracile*, Nicholson & Hinde, 1874, Can. Jour., vol. 14, Niagara Gr. [Sig. slender.]
- AULACOPHYLLUM, Edwards & Haime, 1854, British Fossil Corals. [Ety. *aulas*, a furrow; *phyllon*, a leaf.]  
*bilaterale*, Hall, 1882, Foss. Corals,

- Niagara and Up. Held. Gr., Corniferous limestone. [Sig. bilateral.]
- AULACOPHYLLUM conigerum**, Davis (In press). Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Upper Devonian. [Sig. bearing a cone.]
- convergens, Hall, 1882. Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. converging.]
- cruciforme, Hall, 1882. Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. cruciform.]
- mutabile, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Middle Devonian. [Sig. changeful.]
- parvum, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Middle Devonian. [Sig. small.]
- pinnatum, Hall, 1882. Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. plumed.]
- poculum, Hall, 1882. Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. a cup.]
- præciptum, Hall, 1882. Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. anticipated.]
- prateriforme, Hall, 1882. Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. prateriform?]
- princeps, Hall, 1882. Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. first.]
- reflexum, Hall, 1882. Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. turned back.]
- sulcatum, D'Orbigny, 1850. Prodr. d. Pal., vol. 1, p. 105, Corniferous limestone. [Sig. furrowed.]
- tripinnatum, Hall, 1882. Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. three pinnated.]
- tristulcatum, Hall, 1882. Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. three furrowed.]
- unguloideum, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Lower Devonian. [Sig. like a hoof.]
- AULOPORA canadensis**, 1875 (Alecto canadensis), Can. Nat. and Geo., vol. 7. Corniferous limestone. [Ety. proper name.]
- culmula, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Devonian. [Sig. a little stalk.]
- procumbens, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Middle Devonian. [Sig. prostrate.]
- BARYPHYLLUM fungulus**, White, 1878, Proc. Acad. Nat. Sci., Niagara Gr. [Sig. a small mushroom.]
- verneuillanum, Edwards & Haime, 1851, Mon. d. Pol. foss. d. Terr. Pal., Niagara Gr. [Ety. proper name.]
- BLOTHROPHYLLUM cinctutum**, Davis (In press), Foss. Corals of Ky., vol. 1, Pal. Ky. St. Geo. Sur., Middle Devonian. [Sig. girt.]
- corium, Davis (In press), Foss. Corals of Ky., vol. 1, Pal. Ky. St. Geo. Sur., Middle Devonian. [Sig. bark, skin.]
- louisvillense, Davis (In press), Foss. Corals of Ky., vol. 1, Pal. Ky. St. Geo. Sur., Middle and Upper Devonian. [Ety. proper name.]
- multalicatum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. many plastered.]
- niagarensis, Davis (In press), Foss. Corals of Ky., vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Ety. proper name.]
- papulosum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. pustuled.]
- parvulum, Davis (In press), Foss. Corals of Ky., vol. 1, Pal. Ky. St. Geo. Sur., Middle Devonian. [Sig. very small.]
- promissum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. hanging down.]
- sessile, Davis (In press), Foss. Corals of Ky., vol. 1, Pal. Ky. St. Geo. Sur., Middle Devonian. [Sig. dwarfish, seeming to sit.]
- sinuosum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. sinuous.]
- Calamopora cellulata*, see Favosites cellulata.
- goldfussi*, see Favosites goldfussi.
- minuta*, see Favosites minuta.
- minutissima*, see Favosites minutissima.
- radians*, see Favosites radians.
- verneuili*, see Favosites verneuili.
- CALCEOLA** should be removed from the Brachiopoda to this class.
- attenuata, Lyon, 1879, Proc. Acad. Nat. Sci., Niagara Gr. [Sig. attenuated.]
- corniculum, Lyon, 1879, Proc. Acad. Nat. Sci., Niagara Gr. [Sig. a little horn.] Is it a syn. for *C. tennesseensis*?
- coxi, Lyon, 1879, Proc. Acad. Nat. Sci., Niagara Gr. [Ety. proper name.] Is it a syn. for *C. tennesseensis*?
- proteus, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Ety. mythological name.]
- pusilla, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. very small.]
- CALLOGRAPTUS niagarensis**, Spencer, 1878, Can. Nat., vol. 8, Niagara Gr. [Ety. proper name.]
- CALOPHYLLUM**, Dana, 1848, Zoophytes U.S. Expl. Exped., vol. 8. [Ety. *kalos*, beautiful; *phyllon*, a leaf.]
- phragmoceras, Salter, 1852, Sutherland's Jour., vol. 2. Up. Sil. [Sig. a partitioned horn.]



- CALYPTOGRAPTUS**, Spencer, 1878, Can. Nat., vol. 8. [Ety. *kalyptos*, covered; *grapho*, to write.]
- cyathiformis*, Spencer, 1878, Can. Nat., vol. 8, Niagara Gr. [Sig. cup shaped.]
- subretiformis*, Spencer, 1878, Can. Nat., vol. 8, Niagara Gr. [Sig. somewhat net formed.]
- CANNAPORA** *annulata*, Nicholson & Hinde, 1874, Can. Jour., Niagara Gr. [Sig. ringed.]
- Caryophyllia cornicula*, see *Zaphrentis cornicula*.
- gigantea*, see *Zaphrentis gigantea*.
- pulmonea*, see *Zaphrentis pulmonea*.
- CATENIPORA** *melchlini*, Castlenau, syn. for *Halysites catenulatus*.
- CHETETES** *aquidistans*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. equidistant.]
- arcticus*, Haughton, 1857, Jour. Roy. Dub. Soc., vol. 1. [Sig. arctic.]
- compressus*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. compressed.] This is a bryozoan.
- crebrirama*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having dense branches.]
- egenus*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. destitute of.]
- elegans*, Ulrich, see *Monticulipora elegans*.
- internascens*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. growing between.]
- irregularis*, see *Monticulipora irregularis*.
- filiosa*, see *Monticulipora filiosa*.
- fusiformis*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Hud. Riv. Gr. [Sig. fusiform.]
- granuliferus*, see *Monticulipora granulifera*.
- milieporaceus*, Edwards & Haime, 1851, Mon. d. Pol. foss. d. Terr. Pal. Carboniferous. [Sig. having innumerable pores.]
- moniliformis*, refer to *Monticulipora moniliformis*.
- ramosus*, see *Monticulipora ramosa*.
- subglobosus*, Ulrich, see *Monticulipora subglobosa*.
- undulatus*, see *Monticulipora undulata*.
- venustus*, see *Monticulipora venusta*.
- CHONOPHYLLUM** *capax*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. capacious.]
- magnificum*, was published in Can. Jour., vol. 5, in 1860.
- nanum*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Upper Devonian. [Sig. a dwarf.]
- sedalense*, White, 1880, 12th Rep. U. S. Geo. Sur. Terr., Choteau Gr. [Ety. proper name.]
- vadum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. shallow.]
- CHONOSTEGITES**, Edwards & Haime, 1851, Pol. Foss. des Terr. Pal., p. 299. [Ety. *konos*, a cone; *steges*, a covering.]
- clappi*, Edwards & Haime, 1851, Pol. Foss. des Terr. Pal. p. 299, Up. Held. Gr. [Ety. proper name.]
- CLADOPORA** *alcicornis*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Up. Devonian. [Sig. elk's horn.]
- aculeata*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. having prickles or spines.]
- acupicta*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian [Sig. punctured as with a needle.]
- bifurca*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. two pronged, forked.]
- canadensis*, Rominger, is a syn. for *Pachypora frondosa*.
- crassa*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. thick.]
- dentata*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. having teeth.]
- desquamata*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. scaled, peeled.]
- dispansa*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. spread out flat.]
- equisetalis*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. from the plant Equisetum.]
- fibrata*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian, [Sig. fibrous.]
- foliata*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. arranged in leaves.]
- gracilis*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid. Devonian. [Sig. slender.]
- gulelmi*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Up. Devonian. [Ety. proper name.]
- knappi*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Ety. proper name.]
- lichenoides*, Rominger, 1876. This name was preoccupied by Winchell & Marcy, in 1865. See *C. winchellana*.
- menis*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. a crescent.]
- ordinata*, Davis (In press), Foss. Corals

- of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. from the arrangement in rows.]
- CLADOPOPA proboscidalis**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. having a proboscis.]
- rieta**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. open mouth.]
- robusta var. tela**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. a web.]
- sarmentosa**, Hall, 1876, Desc. new species of fossils from Waldron, Niagara Gr. [Sig. full of branches.]
- striata**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. striped.]
- undosa**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. wavy.]
- winchellana**, n. sp., Up. Held. Gr. This name is proposed for the species described by Rominger, under the preoccupied name of *C. lichenoides*, in his Fossil Corals, p. 47, pl. 17, figs. 1 and 4. Named in honor of Alexander Winchell.
- CLISIOPHYLLUM austini**, Salter, 1852 (*Strephodes austini*), Sutherland's Jour., vol. 2, Devonian. [Ety. proper name.]
- danaanum**, Edwards & Haime, 1851, Mon. d. Pol. foss. d. Terr. Pal., Low. Held. Gr. [Ety. proper name.]
- pluriradiale**, Nicholson, 1874, Pal. Prov. Ontario, Corniferous limestone. [Sig. many radiated.]
- tumulus**, Salter, 1855, Belcher's last of the Arctic Voyages, vol. 2, Carboniferous. [Sig. a mound.]
- Cænites lunata*, see *Linaria lunata*.
- COLUMNARIA halli**, Nicholson, 1879, Tabulate Corals, syn. for *C. alveolata*.
- mamillar*, and *C. multiradiata*, Castelnau, 1843, are not recognized by palæontologists.
- sutherlandi**, Salter, 1852, Sutherland's Jour., vol. 2, Devonian. [Ety. proper name.]
- COLUMNOPORA rayi**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Hud. Riv. Gr. [Ety. proper name.]
- CRASPEDOPHYLLUM**, Dybowski, 1873, Beschreibung neuen aus Nordamerika, Stammenden Devonischen, art der Zoantharia rugosa. [Ety. *kraspedos*, an edge; *phyllon*, a leaf.]
- americanum**, Dybowski, 1873, Beschr. d. a. Norda. s. Dev. a. d. Zoanth. rugosa., Up. Held. Gr., at Columbus, O. [Ety. proper name.]
- Crepidophyllum*, Nicholson & Thompson, 1877, Proc. Royal Soc. Edinburgh, vol. 9. A proposed name to include *Diphyphyllum archiaci*.
- CYATHAXONIA columellata**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. pillared.]
- cynodon**, Rafinesque & Clifford, 1820, Monographie d. Turbinolides, in Ann. d. Phys. d. Brux., t. 5, Waverly Gr. [Sig. dog tooth.]
- gainesi**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Hud. Riv. Gr. [Ety. proper name.]
- herzeri**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Ety. proper name.]
- profunda**, Edwards & Haime, 1851, Mon. d. Pol. foss. d. Terr. Pal., Carboniferous. [Sig. profound.]
- wisconsinensis**, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Ety. proper name.]
- CYATHOPHYLLUM agglomeratum**, *C. ammonis*, *C. arborescens*, *C. atlas*, *C. conicum*, *C. distinctum*, *C. d'orbigny*, *C. goldfussi*, *C. goliath*, *C. michelini*, *C. plicatulum*, *C. rollini*, *C. striatulum*, and *C. vicinum*, are Castelnau's species imperfectly described in 1843, in his Systeme silur. de l'Amerique septentr. They are not recognized by American authors.
- articulatum**, Wahlenberg (Madreporites articulatus), Nov. Act. Upsal., vol. 8, Up. Sil. This, though identified by some from America, is probably not an American species.
- artefossa**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. close wrinkled.]
- brevicornis**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Devonian. [Sig. short horn.]
- bullatum**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. vesicled.]
- bullulatum**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. little vesicled.]
- canaliculatum**, Hall 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. canaliculated.]
- cohaerens**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. coherent.]
- concentricum**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. concentric.]
- depressum**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. depressed.]
- exfoliatum**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. exfoliated.]
- fimbriatum**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid. Devonian. [Sig. fringed.]
- flor**, Davis (In press), Foss. Corals of

Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. and Devonian. [Sig. a flower.]

*CYATHOPHYLLUM gemmiferum*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Devonian. [Sig. bearing buds.]

*gigas* is a syn. for *Zaphrentis gigantea*.  
*impositum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. laying over.]

*infoveatum*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Devonian. [Sig. without a fovea.]

*intertrium*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Ety. from the three smaller lamellæ between the larger ones.]

*intervesculum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. having vesicles between.]

*juvenis*, is without letter j in part of the 1st edition of this work.

*lesueuri*, should be accredited to Edwards & Haime, 1851, Mon. d. Pol. Foss. d. Terr. Pal.

*multicrena*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Devonian. [Sig. many notched.]

*nevadense*, Meek, 1877, U. S. Geo. Sur., 40th parallel, Carboniferous. [Ety. proper name.]

*œdipus*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. and Mid. Devonian. [Sig. having a club foot.]

*palmeri*, Meek, 1877, U. S. Geo. Sur., 40th parallel, Devonian. [Ety. proper name.]

*perfossulatum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. having many little ditches.]

*perplicatum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. many plicated.]

*pickthorni*, Salter, 1852 (*Strephodes pickthorni*), Sutherland's Jour., vol. 2, Devonian. [Ety. proper name.]

*plicatum*, Goldfuss, 1826, Germ. Petref. This specific name is condemned as American, because Goldfuss applied it to two distinct species at the same time—one from America and the other from Sweden.

*pocillum*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid. and Up. Devonian. [Sig. a little cup.]

*pumilus*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid. Devonian. [Sig. a dwarf.]

*pushtulatum*, Conrad, 1848. Not clearly defined.

*robustum*, Hall, 1882, Foss. Corals, Ni-

agara and Up. Held. Gr., Corniferous limestone. [Sig. robust.]

*CYATHOPHYLLUM scalenum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. having unequal sides.]

*septatum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. partitioned.]

*tornatum*, Davis (In press) Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Up. Devonian. [Sig. rounded as in a lathe.]

*vesiculatum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. vesicled.]

*zenkeri*, Billings, 1860, Can. Jour., vol. 5, Corniferous limestone. [Ety. proper name.]

*CYSTIPHYLLUM bifurcatum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. bifurcated.]

*bipartitum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. two parted.]

*cicatriciferum*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Up. Devonian. [Sig. bearing a scar.]

*crateriforme*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. crateriform.]

*granilineatum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. granule lined.]

*hispidum*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. prickly, thorny.]

*incurvum*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. crooked.]

*infundibulum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. a funnel.]

*latiradius*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. wide rayed.]

*limbatum*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. bordered, like a garment with flounces.]

*lineatum*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. and Low. Devonian. [Sig. lined.]

*muricatum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. pointed.]

*nanum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. a dwarf.]

*nettlerothi*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Ety. proper name.]

- CYSTIPHYLLUM** obliquum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. oblique.]
- os, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. a bone.]
- plicatum, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. and Mid. Devonian. [Sig. folded in plaits.]
- pustulatum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. pustulated.]
- quadrangulare, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. quadrangular.]
- scalatum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. having stairs.]
- striatura, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. channeled.]
- sulcatum was described in 1858, in Can. Nat. & Geol., vol. 3.
- supraplanum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. very level.]
- tenuiradius, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. fine rayed.]
- theissi, Davis (In press), Foss. Corals in Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid. Devonian. [Ety. proper name.]
- zaphrentiforme, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low Devonian. [Sig. formed like Zaphrentis.]
- CRYSTOSTYLUS**, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis. [Ety. *kustis*, a bladder; *stylos*, a stalk.]
- typicus, Whitfield, 1880, Ann. Rep. Geo. Sur., Wis., Niagara Gr. [Sig. the type.]
- DANIA**, Edwards & Haime, 1849, Comptes Rendus, t. 29, p. 261. [Ety. proper name.]
- huronica, Edwards & Haime, 1849, Comptes Rendus, t. 29, Up. Silurian. [Ety. proper name.]
- DEKAYIA**, Edwards & Haime, 1851, Mon. d. Pol. foss. d. Terr. Pal., p. 277. [Ety. proper name.]
- aspera, Edwards & Haime, 1851, Mon. d. Pol. foss. d. Terr. Pal., Hud. Riv. Gr. [Sig. rough.]
- atritra, Nicholson (Chetetes attritus), syn. for D. aspera.
- DENDROGRAPTUS** compactus, Walcott, 1879, Utica Slate and related formations, Utica Slate. [Sig. compact.]
- gracillimus, Lesquereux, 1877, Proc. Am. Phil. Soc. (Psilophyton gracillimum), Hud. Riv. Gr. [Sig. very slender.]
- DENDROGRAPTUS** novellus, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. young.]
- simplex, Walcott, 1879, Utica Slate and related formations, Utica Slate. [Sig. simple.]
- tenuiramosus, Walcott, 1879, Utica Slate and related formations, Utica Slate. [Sig. very branchy.]
- DENDROPORA** ornata refer to Trachypora ornata.
- osculata, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Devonian. [Sig. kissed, joined by contact.]
- DICTYONEMA** fenestrata was described in 1851, in Foster & Whitney's Rep. on the Lake Superior Land District.
- pergracilis, Hall and Whitfield, 1872, 24th Reg. Rep., Niagara Gr. [Sig. very slender.]
- tenella, Spencer, 1878, Can. Nat., vol. 8, Niagara Gr. [Sig. delicate.]
- websteri was described in 1860, Can. Nat. & Geo., vol. 5.
- DIORRYCHOPORA**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur. [Ety. *diorrusso*, to dig a canal; *pōra*, a tube.]
- tenuis, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. slender.]
- DIPHYPHYLLUM** adnatum, Hall, 1882, Foss. Corals, Niagara and Up. Held Gr., Corniferous limestone. [Sig. adnate.]
- apertum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. opened.]
- bellis, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid. Devonian. [Sig. a daisy.]
- breve, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. short.]
- coagulatam, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid. Devonian. [Sig. thickened.]
- coalescens, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid. Devonian. [Sig. growing together.]
- conjunctum, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid Devonian. [Sig. joined intimately.]
- cylindraceum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. like cylinders.]
- dividuum, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. separable.]
- fasciculum, Meek, 1877, U. S. Geo. Sur., 40th parallel, Devonian. [Sig. a small bundle.]
- gracile, McCoy, 1854, Brit. Pal. Foss., Corniferous limestone. [Sig. slender.]
- tumidulum, Hall, 1882, Foss. Corals,

- Niagara and Up. Held. Gr., Corniferous limestone. [Sig. tumid.]
- DIPLOGRAPTUS** hudsonicus, Nicholson, 1875, Pal. Prov. Ont., Hud. Riv. Gr. [Ety. proper name.]
- hypniformis, White, 1874 (Graptolithus hypniformis), Rep. Invert. Foss., Trenton Gr. [Sig. like *Hypnum*, from the moss-like aspect of the stipes.]
- Diplotrypa*, Nicholson, 1879, Tabulate Corals. A subgeneric name, founded upon *Monticulipora petropolitana*.
- DRYMOFORA**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur. [Ety. *drumos*, a thicket; *pora*, a tube.]
- auloporoidea, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Up. Devonian. [Sig. resembling *Aulopora*.]
- commensalis, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid. Devonian. [Sig. living at the same table.]
- frutectosa, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Up. Devonian. [Sig. shrubby, bushy.]
- ELASMOPHYLLUM**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr. [Ety. *elasma*, lamella; *phyllon*, a leaf.]
- attenuatum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. attenuated.]
- ERIDOPHYLLUM** sincoense is from the Corniferous limestone.
- FAVISTELLA** calicina, Nicholson, 1874, Rep. Brit. Assoc., Hud. Riv. Gr. [Sig. a little cup.]
- franklini, Salter, 1852, Sutherland's Jour., vol. 2, Up. Sil. [Ety. proper name.]
- reticulata, Salter, 1852, Sutherland's Jour., vol. 2, Up. Sil. [Sig. reticulated.]
- FAVOSITES** *alveolaris* may be stricken out as not an American species.
- amplissimus, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. and Mid. Devonian. [Sig. very large or ample.]
- arbor, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. a tree.]
- baculus, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. a staff, a scepter.]
- canadensis, Billings, 1858, Can. Nat. & Geol., vol. 3, instead of *Fistulipora canadensis*.
- cariosus, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. & Mid. Devonian. [Sig. worm eaten.]
- cellulata*, (Castelnau, 1843 (*Calamopora cellulata*), Syst. Sil. From Point Latour, northeast of Lake Huron, but not recognized by later authors for some reasons not known to the author.
- FAVOSITES** clelandi, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Ety. proper name.]
- convexus, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. and Mid. Devonian. [Sig. convex.]
- cymosus, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. and Mid. Devonian. [Sig. full of sprouts.]
- chapmani, Nicholson, 1874, Pal. Prov. Ont., Corniferous limestone. [Ety. proper name.]
- divergens, Winchell, 1862, Proc. Acad. Nat. Sci., Low. Carb. [Sig. diverging.]
- emmonsii*, Rominger, syn. for *F. heliolitiformis*.
- eximius, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Up. Devonian. [Sig. uncommon, remarkable.]
- flabelliformis*, Troost, 1843. Not satisfactorily defined.
- forbesi, var. occidentalis, Hall, 1876, 28th Reg. Rep., Niagara Gr. [Sig. western.]
- forbesi* var. *waldronei*, Nicholson, syn. for *F. forbesi*, var. occidentalis.
- frutex, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. a shrub, a bush.]
- fustiformis, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. club shaped.]
- goldfussi, Castelnau, 1843, Syst. Sil. (*Calamopora goldfussi*, Up. Sil. [Ety. proper name.]
- goodwyni, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Up. Dev. [Ety. proper name.]
- hamiltonensis*, Rominger, syn. for *F. dumosus*.
- impeditus, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. hindered, of stunted growth.]
- louisvillensis, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Ety. proper name.]
- mamillaris*, Castelnau, 1843, Syst. Sil. Not recognized.
- manus instead of *F. manus*.
- minuta* and *F. minutissima*, Castelnau. Not recognized.
- mundus, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. and Mid. Devonian. [Sig. neat, pretty.]
- mundus var. *placentoideus*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. De-

- vonian. [Sig. resembling *F. placenta*.]
- FAVOSITES** *occidens*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Sig. western]
- parvo*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. a peacock, in allusion to the resemblance between the larger round tubes regularly interspersed among the smaller polygonal tubes of the fossil and the dotted circles or "eyes" of a peacock's tail.]
- pirum*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid. Devonian. [Sig. a pea.]
- proximus*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low Devonian. [Sig. a near neighbor.]
- quercus*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. an oak.]
- radians*, Castelnau, 1843. Not recognized.
- ramulosus*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. having small branches.]
- rotundituba*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara and Devonian. [Sig. round tubed.]
- spiculatus*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. bearing spicules or spikes.]
- spinigerus* instead of *F. niagarensis*, var. *spinigerus*.
- spongilla*, Rominger, syn. for *F. spinigerus*.
- troosti*, Edwards & Haime, 1851, Mon. d. Pol. foss. d. Terr. Pal., Devonian. [Ety. proper name.]
- verneuili*, Castelnau, 1843, syn. for *Monticulipora fibrosa*.
- Favositopora palaeozoica*, Kent, 1870, Ann. & Mag. Nat. Hist., 4 ser., vol. 6. Not recognized.
- FISTULIPORA** *canadensis*, refer to *Favosites canadensis*.
- flabellata*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. from *flabellum*, a fan.]
- lens*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Hud. Riv. Gr. [Sig. a lentil.]
- rugosa*, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Hud. Riv. Gr. [Sig. rugose.]
- solidissima*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Hud. Riv. Gr. [Sig. very solid.]
- GRAPTOLITHUS** *annectans*, Walcott, 1879, Utica Slate and related formations, Utica Slate Gr. [Sig. connected together.]
- GRAPTOLITHUS** *whitianus*, n. sp. Hud. Riv. Gr., from five miles north of Belmont, Nevada. Proposed instead of *G. ramulus* of White, 1874, Exp. and Sur., W. 100th merid., Prelim. Rep. Invert. Foss. p. 13, and vol. 4, pt. 1, p. 62, pl. iv., figs. 3a, 3b and 3c. The name was preoccupied by Hall, for a distinct species in the same genus.
- HADROPHYLLUM** *glans*, instead of *Zaphrentis glans*.
- HALLIA**, Edwards & Haime, 1851, Mon. d. Pol. foss. d. Terr. Pal. [Ety. proper name.]
- divergens*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. diverging.]
- divisa*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. dividing.]
- insignis*, Edwards & Haime, 1851, Mon. d. Pol. foss. d. Terr. Pal., Up. Held. Gr. [Sig. marked.]
- pluma*, Hall, 1882, Foss. Corals Niagara and Up. Held. Gr., Niagara Gr. [Sig. a small, soft feather.]
- scitula*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. handsome.]
- HALYSITES** *catenulatus*, var. *feildeni*, Etheridge, 1878, Quar. Jour. Geo. Soc., vol. 34, Upper Silurian. [Ety. proper name.]
- catenulatus*, var. *harti*, Etheridge, 1878, Quar. Jour. Geo. Soc., vol. 34, Up. Sil. [Ety. proper name.]
- labyrinthica*, Goldfuss, 1826 (*Catenipora labyrinthica*). Petref. Germ. Niagara Gr. [Sig. labyrinthine.]
- nexus*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. linked together.]
- parryi*, König, 1824 (*Catenipora parryi*), Supp. to App. of Capt. Parry's Voyage for the Discovery of a Northwest Passage, Up. Sil. [Ety. proper name.]
- HELIOLITES** should be credited to Guettard, Mem. 3, p. 454.
- HELIOPHYLLUM** *acuminatum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. acuminated.]
- aequale*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. equal.]
- aequum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. even, level.]
- alternatum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. alternated.]
- annulatum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. annulated.]
- campaniforme*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. bell formed.]
- canadense*, Billings, 1859, Can. Jour.,

- vol. 4, Corniferous limestone. [Ety. proper name.]
- HELIOPHYLLUM** cancellatum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. cancellated.]
- cayugaense, Billings, 1859, Can. Jour. vol. 4, Corniferous limestone. [Ety. proper name.]
- compactum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. compact.]
- dentatum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. toothed.]
- denticulatum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. denticulated.]
- dentilineatum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. tooth lined.]
- distans, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. distant.]
- fasciculatum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. fasciculated.]
- fecundum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. fruitful.]
- fissuratum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. fissured.]
- gemmaatum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. budded.]
- gemmaferum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. bud bearing.]
- imbricatum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. imbricated.]
- incrassatum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. thickened.]
- invaginatum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. invaginated.]
- lateri crescens, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. side growing.]
- lineolatum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. fine lined.]
- mitella, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. a head band.]
- nettlerothi, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Ety. proper name.]
- pocillatum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. little cupped.]
- pravum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. cooked.]
- puteatum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. having a little well.]
- HELIOPHYLLUM** scyphulus, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. a small cup.]
- sordidum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. poor.]
- tenuimurale, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. thin walled.]
- venatum, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. veined.]
- verticale, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. vertical.]
- Heterotrypa*, Nicholson, 1879, Pal. Tab. Cor., p. 293. Proposed as a subgenus of *Monticulipora*.
- INOCALUS** arbuscula, Ulrich, 1879 Jour. Cin. Soc. Nat. Hist, vol. 2, Hud. Riv. Gr. [Sig. a little shrub.]
- divaricatus, Hall, 1879, Desc. New Species Foss., Niagara Gr. [Sig. spread apart.]
- problematicus, Spencer, 1878, Can. Nat., vol. 8, Niagara Gr. [Sig. problematic.]
- LEPTOPORA** *typa* should be referred to the Marshall or Kinderhook Gr.
- winchelli, White, 1879, Bull. U. S. Sur., vol. 5, No. 2, Carboniferous. [Ety. proper name.]
- LIMARIA** lunata, Nicholson & Hinde, 1874 (*Cœnites lunata*), Can. Jour., Niagara Gr. [Sig. lunate.]
- LINDSTROMIA**, Nicholson & Thompson, 1877, Proc. Roy. Soc. Edinb., vol. 9. [Ety. proper name.]
- columnaris, Nicholson & Thompson, 1877, Proc. Roy. Soc. Edinb., vol. 9, Devonian. [Sig. columnar.]
- LITHOSTROTION** *harmodites*, Edwards & Haime, 1851, Mon. d. Pol. foss. d. Terr. Pal., Carboniferous. [Sig. well-fitting stone.]
- junceum, Fleming, 1828 (*Caryophyllæa juncea*). Brit. Anim., Subcarboniferous. From Feilden Isthmus, the most northern point of land. [Sig. made of rushes.]
- microstylum, White, 1880, 12th Rep., U. S. Sur. Terr., Kinderhook Gr. [Sig. having small stalks.]
- stokesi, Edwards & Haime, 1851, Mon. d. Pol. foss. d. Terr. Pal., Carboniferous. [Ety. proper name.]
- whitneyi, Meek, 1875, Wheeler's Sur. W. 100th meridian, vol. 4, Coal Meas. [Ety. proper name.]
- LOPHOPHYLLUM** *calceola*, see *Zaphrentis calceola*.
- LYELLIA** *americana* is from the Niagara Group.
- glabra*, Owen, 1840 (*Sarcinula glabra*), Rep. on Mineral Lands, Devonian.



- [Sig. smooth.] This species was too poorly defined for identification.
- puella, Davis (In press). Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. a young thing.]
- MICHELINIA** *clappi*, refer to *Chonostegites clappi*.
- expansa, White, 1880, 12th Rep., U. S. Geo. Sur. Terr., Kinderhook Gr. [Sig. expanded.]
- niagarensis, Davis (In press). Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Ety. proper name.]
- placenta, White, 1880, 12th Rep., U. S. Geo. Sur. Terr., Kinderhook Gr. [Sig. a cake.]
- plana, Davis (In press). Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Up. Devonian. [Sig. flat, from the flat tabulæ.]
- prima, Davis (In press). Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. first.]
- trochiscus*, Rominger, is a syn. for *Pleurodictyum americanum*.
- MILLERIA**, Davis (In press). Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur. [Ety. proper name.]
- laminata, Davis (In press). Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. arranged in thin plates.]
- MONOGRAPTES** *convolutus* var. *coppingeri*, Etheridge, 1878, Quar. Jour. Geo. Soc., vol. 34, Silurian. [Ety. proper name.]
- Monotrypa*, Nicholson, 1879, Pal. Tab. Cor., p. 320. Proposed as a subgenus of *Monticulipora*.
- MONTICULIPORA** *andrewsi*, Nicholson, 1881, Struct. and Affin. of Montic., Hud. Riv. Gr. [Ety. proper name.] This is supposed to be the type of *M. fibrosa*.
- barrandei* should be referred to the Ham. Gr.
- briareus* belongs to the Utica Slate Gr., and so far as known, does not pass up into the Hud. Riv. Gr.
- calceolus*, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. a little shoe.]
- dawsoni*, Nicholson, 1881, Struct. and Affin. of Montic., Hud. Riv. Gr. [Ety. proper name.]
- elegans*, Ulrich, 1879 (*Chetetes elegans*), Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. elegant.]
- filiasa*, D'Orbigny, 1850, Prodr. de Pal. Hud. Riv. Gr. [Sig. having offshoots.]
- fletcheri* is not an American species.
- granulifera*, Ulrich, 1879 (*Chetetes granuliferus*), Jour. Cin. Soc. Nat. Hist., vol. 2, Trenton Gr. [Sig. grain bearing.]
- implicata*, Nicholson, 1881, Struct. and Affin. of Montic., Hud. Riv. Gr. [Sig. implicated.]
- MONTICULIPORA** *irregularis*, Ulrich, 1879, (*Chetetes irregularis*), Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. irregular.]
- molesta*, Nicholson, 1881, Struct. and Affin. of Montic., Hud. Riv. Gr. [Sig. troublesome.] Syn. for *M. mammulata* (?).
- moniliformis*, instead of *Chetetes moniliformis*.
- multituberculata*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Hud. Riv. Gr. [Sig. having many tubercles.]
- petasiformis*, Nicholson, 1881, Struct. and Affin. of Montic., Hud. Riv. Gr. [Sig. like a broad-brimmed hat.]
- punctata*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Hud. Riv. Gr. [Sig. punctured.]
- ramosa*, D'Orbigny, 1850, Prodr. d. Pal., t. 1, p. 25, Hud. Riv. Gr. [Sig. ramose.]
- rectangularis*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Hud. Riv. Gr. [Sig. rectangular.]
- selwyni*, Nicholson, 1881, Struct. and Affin. of Montic., Trenton Gr. [Ety. proper name.]
- selwyni*, var. *hospitalis*, Nicholson, 1881, Struct. and Affin. of Montic., Hud. Riv. Gr. [Sig. relating to a guest.]
- subglobosa*, Ulrich, 1879 (*Chetetes subglobosus*), Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. subglobose.]
- trentonensis*, Nicholson, 1881, Struct. and Affin. of Montic., Trent. Gr. [Ety. proper name.]
- ulrichi*, Nicholson, 1881, Structure and Affinities of the genus *Monticulipora*, Hud. Riv. Gr. [Ety. proper name.] Nicholson subdivided the genus *Monticulipora* in the above mentioned work into six subgenera, viz.: *Heterotrypa*, *Diplotrypa*, *Monotrypa*, *Prasopora*, and *Peronopora*. I endeavored to show, in a notice of the work, published in the Jour. Cin. Soc. Nat. Hist., vol. 5, that this subdivision of the genus is of very little if any value.
- undulata*, Nicholson, 1875 (*Chetetes undulatus*) Pal. of Ontario, Hud. Riv. Gr. [Sig. undulated.]
- venusta*, Ulrich, 1878 (*Chetetes venustus*), Jour. Cin. Soc. Nat. Hist., vol. 1, Utica Slate Gr. [Sig. beautiful.]
- whiteavesi*, Nicholson, 1881, Struct. and Affin. of Montic., Trenton Gr. [Ety. proper name.]
- NICHOLSONIA**, Davis (In press). Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur. [Ety. proper name.]
- angulata*, Davis (In press). Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid. Devonian [Sig. having angles.]

- OMPHYA verrucosa, should be credited to Rafinesque and Clifford, 1820, Monog. d. Turbinolides in Ann. d. phys. d. Brux., t. 5.
- PACHYPORA, Lindstrom. 1873. Ofversigt af K. Vetensk. Akad. Förhandl. [Ety. *pachys*, thick; *poros*, a pore.] *fischeri* instead of *Alveolites fischeri*. *frondosa* instead of *Alveolites frondosus*.
- PALEOCYCLUS was defined in Comptes rendus, t. 29.
- Peronopora*, Nicholson, 1881, Struct. and Affin. of Montic. Proposed as a subgenus of *Monticulipora*.
- PHILLIPSASTREA ingens Davis, (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. very large.] *mamillaris* refer to *Strombodes mamillaris*.
- PLEURODICTYUM americanum. Rømer, 1876, Lethæa Palæozoica, pl. 33, figs. 2a and 2b, Ham. Gr. [Ety. proper name.]
- PLUMALINA is referred by Prof. Hall to the family Plumularidæ.
- densa*, Hall, 1879, 30th Rep., N. Y. State Museum, Ham. Gr. [Sig. dense.]
- PRASOPORA, Nicholson & Etheridge, 1877, Ann. and Mag. Nat. Hist., 4th ser., vol. 20, p. 38. A subgenus of *Monticulipora* including *M. selwyni*, and *M. selwyni* var. *hospitalis*.
- PROCTERIA, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur. [Ety. proper name.] *micelinoidea*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid. Devonian. [Sig. resembling *Michelinia*.]
- papillosa*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid. Devonian. [Sig. having small prominences.]
- PTILOGRAPTUS foliaceus, Spencer, 1878, Can. Nat., vol. 8, Niagara Gr. [Sig. leafy.]
- PTYCHOPHYLLUM coniferum, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. cone bearing.] *diaphragma*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. a diaphragm.] *floriforme*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. flower formed.] *fulcratum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. stayed with props.] *infundibulum*, Meek, 1877, U. S. Geo. Sur., 40th parallel, Devonian. [Sig. a funnel.] *invaginatium*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. incased, cup in cup.]
- PTYCHOPHYLLUM ipomoea, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. a morning glory.] *striatum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. striated.] *tropæum*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. returning.] *typicum*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid. Devonian. [Sig. typical.] *versiforme*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. changeable.]
- Quenstedtia*, Rominger, 1876, being preoccupied by Morris & Lycett, in 1853, Nicholson proposed *Romingeria*.
- RHIZOGRAPTUS, Spencer, 1878, Can. Nat., vol. 8. [Ety. *riza*, a root; *grapho*, to write.] *bulbosus*, Spencer, 1878, Can. Nat., vol. 8, Niagara Gr. [Sig. bulbous.]
- ROMINGERIA, Nicholson, 1879, Tabulate Corals. Proposed instead of *Quenstedtia*, Rominger, which was preoccupied.
- fasciculata*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid. Devonian. [Sig. arranged in little bundles.] *incrustans*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. and Mid. Devonian. [Sig. incrustating.] *uva*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. and Devonian. [Sig. a bunch or cluster of grapes.] *vannula*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. a little fan.]
- SARCINULA *glabra*, see *Lyellia glabra*.
- SMITHIA *hennahi*, Lonsdale, 1840 (*Astræa hennahi*), Geo. Trans., vol. 5, Devonian. [Ety. proper name.]
- STELLIPORA *limitaris*, Ulrich, syn. for *S. antheloidea*.
- STREPHODES *austini*, see *Clisiophyllum austini*. *pickthorni*, see *Cyathophyllum pickthorni*.
- STREPTELASMA *æquidistans*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. equidistant.] *ampliatum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. enlarged.] *coarctatum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. compressed.] *conspicuum*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. conspicuous.]

- STREPTELASMA crateriforme**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. crateriform.]
- dissimile**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Schoharie Grit. [Sig. dissimilar.]
- exstans**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. projecting.]
- fossula**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. a little ditch.]
- inflatum**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. inflated.]
- involutum**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. involuted.]
- lamellatum**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. lamellated.]
- laterarium**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. belonging to the side.]
- limitare**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. that is on the border.]
- mammiferum**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. mamma bearing.]
- minimum**, syn. for *Duncanella borealis*.
- papillatum**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. papillated.]
- simplex**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. simple.]
- tenue**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. slender.]
- STRIATOPORA alba**, Davis (In press) Foss. Corals of Ky. in vol. 1, Pal. Ky. St. Geo. Sur., Mid. and Up. Devonian. [Sig. White.]
- formosa**, Billings, 1860, Can. Jour., vol. 5, Corniferous Gr. [Sig. beautiful.]
- Stromatocerium* is a sponge, and belongs to the Protista.
- Stromatopora* is a sponge, and belongs to the Protista.
- alternata** is *Stomatopora alternata*.
- hindei** belongs to the Niagara Gr.
- STROMBODES incertus**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. of doubtful affinity.]
- intermedius**, Davis (In press), Foss. Corals of Ky. in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. intermediate, between *S. pentagonus* and *S. mammillatus*.]
- knotti**, Davis (In press), Foss. Corals of Ky. in vol. 1, Pal. Ky. St. Geo. Sur., Low. and Mid. Devonian. [Ety. proper name.]
- STROMBODES mammillatus** should be written *S. mamillaris*, Owen, 1840 (*Astraea mamillaris*), Rep. on Min. Lands, Niagara Gr.
- quadrangularis**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. four angled.]
- sinemurus**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. without a wall.]
- unicus**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. single.]
- STYLASTREA**, Lonsdale, 1845, Geol. and Pal. of Russia and the Ural Mountains. [Ety. *stylos*, a pillar; *aster*, a star.]
- anna**, Whitfield, 1882, Ann. N. Y. Acad. Sci., vol. 2, Up. Held. Gr. [Ety. proper name.]
- SYRINGOLITES**, Hinde, 1879, Geo. Mag. vol. 6. [Ety. *syrinx*, a pipe; *lithos*, stone.]
- huronensis**, Hinde, 1879, Geo. Mag., vol. 6, Niagara Gr. [Ety. proper name.]
- SYRINGOPORA aulopora**, Salter, 1855, Belcher's last of the Arctic Voyages, vol. 2, Carboniferous. [Sig. a porous pipe.]
- harveyi** belongs to the Choteau or Kinderhook Gr.
- infundibulum**, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Sig. a funnel.]
- intermedia** is from the Ham. Gr.
- parallela**, Etheridge, 1878, Quar. Jour. Geo. Soc., vol. 34, Up. Sil. [Sig. parallel.]
- straminea**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. a bundle of straws.]
- THAMNOGRAPTUS bartonensis**, Spencer, 1878, Can. Nat., vol. 8, Niagara Gr. [Ety. proper name.]
- TRACHYFORA ornata** instead of *Dendropora ornata*.
- TROCHOPHYLLUM**, Edwards & Haime, 1851, Mon. d. Pol. foss. d. Terr. Pal. [Ety. *trochos*, a wheel; *phyllon*, a leaf.]
- verneuillianum**, Edwards & Haime, 1851, Mon. d. Pol. foss. d. Terr. Pal., Sub-carboniferous. [Ety. proper name.]
- ZAPHRENTIS acuta**, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 9, Marshall or Choteau Gr. [Sig. acute.]
- annulata**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. annulated.]
- calcariformis**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. spur formed.]
- calceola**, White and Whitfield, 1862 (*Lo-phophyllum calceola*), Proc. Bost. Soc., Nat. Hist., vol. 9, Marshall or Choteau Gr. [Sig. a little shoe.]

- ZAPHRENTIS cannonensis*, Winchell, is from the Chateau or Kinderhook Gr.  
*cassedayi*, Milne-Edwards, 1860, Hist. d. Corallaires, t. 3, Warsaw Gr. [Ety. proper name.]  
*centralis*, Edwards & Haime, 1851, Mon. d. Pol. Foss. d. Terr. Pal., Carboniferous. [Sig. central.]  
*cliffordana*, Edwards & Haime, 1851, Mon. d. Pol. Foss. d. Terr. Pal., Carboniferous. [Ety. proper name.]  
*colletti*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Ety. proper name.]  
*complanata*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. made even.]  
*compressa*, Milne-Edwards, 1860, Hist. d. Corallaires, t. 3, Warsaw Gr. [Sig. compressed.]  
*concava*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. concave.]  
*constricta*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. constricted.]  
*contorta*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. contorted.]  
*convoluta*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. convoluted.]  
*cornalba*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Up. Devonian. [Sig. white horn.]  
*cornicula*, Lesueur, 1820, Mem. du Museum, vol. 1, instead of corniculum, Edwards & Haime.  
*corrugata*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Schoharie Grit. [Sig. corrugated.]  
*cristulata*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. small crested.]  
*curvata*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. curved.]  
*cyathiformis*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous Gr. [Sig. cup-shaped.]  
*dalei*, Edwards & Haime, 1851, Mon. d. Pol. Foss. d. Terr. Pal., Subcarboniferous. [Ety. proper name.]  
*denticulata*, d'Eichwald, 1857. Probably not American.  
*desori*, Edwards & Haime, 1851, Mon. d. Pol. Foss. de Terr. Pal., Low. Held. Gr. [Ety. proper name.]  
*duplicata*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. duplicated.]  
*elegans*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. elegant.]  
*elliptica*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. elliptical.]  
*ZAPHRENTIS excentrica*, Meek, 1872, Hayden's U. S. Geo. Sur. Terr., Coal Meas. [Sig. excentric.]  
*exigua*, var. *elongata*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky., St. Geo. Sur., Low. Devonian. [Sig. lengthened.]  
*exilis*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid. Devonian. [Sig. thin, fragile.]  
*explanata*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Up. Devonian. [Sig. spread out.]  
*fastigata*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. pointed.]  
*foliata*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. leafy.]  
*frequentata*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. frequent.]  
*fusiformis*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. fusiform.]  
*gallicalear*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Up. Devonian. [Sig. cock's spur.]  
*genitiva*, Billings, 1875, Can. Nat. and Quar. Jour., vol. 7, Corniferous Gr. [Sig. original.]  
*gigantea*, Lesueur, 1820, Mem. du Museum, vol. 6, instead of Rafinesque. *glans* refer to *Hadrophyllyum glans*.  
*gravis*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. ponderous.]  
*halli*, Edwards & Haime, Mon. d. Pol. foss. d. Terr. Pal., Ham. Gr. [Ety. proper name.]  
*haysi*, Meek, 1865, Am. Jour. Sci. & Arts, 2d ser., vol. 40, Low. Held. Gr. [Ety. proper name.]  
*herzeri*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Ety. proper name.]  
*immanis*, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid. Devonian. [Sig. immense.]  
*inaequalis*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. unequal.]  
*inclinata*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. inclined.]  
*irregularis*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. irregular.]  
*knappi*, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Ety. proper name.]  
*latisinus*, Hall, 1882, Foss. Corals, Ni-

- agara and Up. Held. Gr., Niagara Gr. [Sig. having a wide sinus.]
- ZAPHRENTIS linneyi**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Devonian. [Ety. proper name.]
- maconathi**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. and Mid. Devonian. [Ety. proper name.]
- marcoui**, Edwards & Haime, 1851, Mon. d. Pol. Foss. d. Terr. Pal., Niagara Gr. [Ety. proper name.]
- nettlerothi**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Up. Devonian. [Ety. proper name.]
- nitida**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. neat.]
- obliqua**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Niagara Gr. [Sig. oblique, inclined.]
- offleyensis**, Etheridge, 1878, Quar. Jour. Geo., vol. 34, Up. Sil. [Ety. proper name.]
- ovalis**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. oval.]
- ovibos**, Salter, 1855, Belcher's last of the Arctic voyages, vol. 2, Carboniferous. [Sig. the musk ox.]
- patella**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Hud. Riv. and Niagara Gr. [Sig. a dish.]
- planima**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. plane.]
- ponderosa**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. ponderous.]
- pressula**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. somewhat compressed.]
- profunda**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. profound.]
- prona**, Milne-Edwards, 1860, Hist. d. Corallaires, Warsaw Gr. [Sig. bent forward.]
- pulmonea**, Lesueur, 1820 (Caryophyllia pulmonea, Mem. du Museum, vol. 6, Carboniferous. [Sig. spongy.]
- racinensis**, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Ety. proper name.]
- rafinesquei**, Edwards & Haime, 1851, Mon. d. Pol. foss. d. Terr. Pal., Up. Held. Gr. [Ety. proper name.]
- ZAPHRENTIS rigida**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. rigid.]
- roemeri**, Edwards & Haime, 1851, Mon. d. Pol. foss. d. Terr. Pal., Delthyris shale. [Ety. proper name.]
- scutella**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Hud. Riv. and Niagara Gr. [Sig. a saucer.]
- sentosa**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. thorny.]
- socialis**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur. Niagara Gr. [Sig. gregarious, sociable.]
- spissa**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. dense.]
- subcompressa**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. somewhat compressed.]
- subvada**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. somewhat shallow.]
- subvesicularis**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Niagara Gr. [Sig. somewhat vesicular.]
- tabulata**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. tabulated.]
- torquata**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Mid. Devonian. [Sig. twisted.]
- torta**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. twisted.]
- transversa**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. transverse.]
- trigemma**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. and Mid. Devonian. [Sig. bearing three buds.]
- trisutura**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. having three sutures.]
- unica**, Davis (In press), Foss. Corals of Ky., in vol. 1, Pal. Ky. St. Geo. Sur., Low. Devonian. [Sig. unique, extraordinary.]
- venusta**, Hall, 1882, Foss. Corals, Niagara and Up. Held. Gr., Corniferous limestone. [Sig. beautiful.]

## CLASS ECHINODERMATA.

### ORDER CRINOIDEA.

FAMILY ACROCRINIDÆ.—Acrocrinus.

FAMILY ACTINOCRINIDÆ.—Actinoecrinus, Agaricoecrinus, Alloprosalloecrinus, Amphoraecrinus, Batocrinus, Cœlocrinus, Dorycerinus, Eretmocrinus, Gennæocrinus, Megistocrinus, Phyetocrinus, Saccocrinus, Steganocrinus, Stereocrinus, Strotocrinus, Teleocrinus.

FAMILY ALLAGECRINIDÆ.—Allagecrinus.

FAMILY ANCYROCRINIDÆ.—Ancyroecrinus.

FAMILY BELEMNOCRINIDÆ.—Belemnocrinus.

FAMILY CALCEOCRINIDÆ.—Calceocrinus, Eucheirocrinus.

FAMILY CALYPTOCRINIDÆ.—Eucalyptocrinus, Hypanthocrinus.

FAMILY CUPRESSOCRINIDÆ.—Aspidocrinus, Edriocrinus, Synbathocrinus.

FAMILY CYATHOCRINIDÆ.—Ampheristocrinus, Arachnoecrinus, Barycerinus, Carabocrinus, Cyathocrinus, Nipteroecrinus, Pachyocrinus, Palæocrinus, Vasocrinus.

FAMILY DIMEROCRINIDÆ.—Cytoecrinus, Dolatocrinus, Macrostylocrinus.

FAMILY GASTEROCOMIDÆ.—Myrtillocrinus.

FAMILY GLYPTOCRINIDÆ.—Archæocrinus, Cupulocrinus, Glyptaster, Glyptocrinus, Lampteroecrinus, Retioecrinus, Xenocrinus.

FAMILY HAPLOCINIDÆ.—Coccoecrinus, Haploecrinus.

FAMILY HETEROCRINIDÆ.—Erisocrinus, Graphioecrinus, Heterocrinus, Iocrinus.

FAMILY HYBOCRINIDÆ.—Anomalocrinus, Hyboecrinus.

FAMILY ICHTHYOCRINIDÆ.—Cleioecrinus, Homalocrinus, Ichthyocrinus, Lecanocrinus, Mespilocrinus.

FAMILY MELOCRINIDÆ.—Ctenocrinus, Mariacrinus, Melocrinus, Technocrinus.

FAMILY PISOCRINIDÆ.—Catillocrinus, Pisocrinus.

FAMILY PLATYCRINIDÆ.—Cordylocrinus, Cotyledonocrinus, Dichocrinus, Eucladocrinus, Marsupioecrinus, Platycrinus, Pterotocrinus, Talarocrinus.

FAMILY POTERIOCRINIDÆ.—Agassizocrinus, Bursacrinus, Cœliocrinus, Cromyocrinus, Decadoecrinus, Dendroecrinus, Eupachycrinus, Homocrinus, Hydreionocrinus, Pachylocrinus, Parisocrinus, Porocrinus, Poteriocrinus, Scaphioecrinus, Scytalocrinus, Zeacrinus.

FAMILY RHODOCRINIDÆ.—Goniasteroidocrinus, Hadroecrinus, Lyriocrinus, Rhodocrinus, Thysanocrinus.

FAMILY STELIDOCRINIDÆ.—Schizocrinus.

FAMILY TAXOCRINIDÆ.—Forbesiocrinus, Onychocrinus, Taxocrinus.

FAMILY AFFINITY UNCERTAIN.—Brachioecrinus, Closteroecrinus, Cystocrinus, Dictyocrinus, Syringocrinus.

### ORDER CYSTOIDEA.

FAMILY AMYGDALOCYSTIDÆ.—Amygdalocystites, Malocystites, Palæocystites.

FAMILY ANOMALOCYSTIDÆ.—Anomalocystites, Ateleocystites.

FAMILY CARYOCRINIDÆ.—Caryocrinus, Heterocystites.

FAMILY COMAROCYSTIDÆ.—Comarocystites.

FAMILY ECHINOCYSTIDÆ.—Echinocystites.

**FAMILY GOMPHOCYSTIDÆ.**—Gomphocystites.

**FAMILY HOLOCYSTIDÆ.**—Crinocystites, Holocystites.

**FAMILY HYBOCYSTIDÆ.**—Hybocystites.

**FAMILY LEPADOCRINIDÆ.**—Apiocystites, Callocystites, Echino-encrinites, Glyptocystites, Lepadocrinus, Pleurocystites, Sphærocystites.

**FAMILY UNCERTAIN.**—Eocystites.

### ORDER BLASTOIDEA.

**FAMILY NUCLEOCRINIDÆ.**—Nucleocrinus.

**FAMILY PENTREMITIDÆ.**—Blastoidocrinus, Granatocrinus, Pentremites, Troostocrinus.

**FAMILY STEPHANOCRINIDÆ.**—Codaster, Codonites, Eleutheroocrinus, Stephanocrinus.

### ORDER PERISHO-ECHINIDÆ.

**FAMILY ARCHÆOCIDARIDÆ.**—Archæocidaris, Eocidaris, Lepidocidaris, Pholidocidaris.

**FAMILY LEPIDECHINIDÆ.**—Lepidechinus, Lepidesthes.

**FAMILY PALÆCHINIDÆ.**—Melonites, Oligoporus, Palæchinus.

### ORDER ASTEROIDEA.

**FAMILY PALÆASTERIDÆ.**—Onychaster, Palæaster, Palæasterina, Petraster, Schænaster, Stenaster.

### ORDER OPHIUROIDEA.

Eugaster, Palæocoma, Protaster, Ptilonaster, Tæniaster.

### ORDER AGELACRINOIDEA, *n. ord. and n. fam.*

This order is proposed to include, so far as known, only the family Agelacrinidæ, and each may, therefore, be defined as follows:

Body thin, circular and parasitic upon other objects. The lower side consists of a thin, smooth, attaching membrane or plate. The upper side is more or less convex, and composed of thin, squamiform or imbricating plates, usually much smaller at the periphery than toward the center. Ambulacra constituting part of the convex surface furrowed on the interior, and composed of a double series of transverse alternating plates, sometimes having smaller, middle, intercalated ones. Two or more rows of ambulacral pores connect the exterior with the interior of each ambulacrum. The so-called ovarian or anal aperture is situated in one of the inter-ambulacral areas, and is usually surrounded by cuneiform plates forming a depressed circular prominence. The genera belonging to this order and family are Agelacrinus, Edrioaster and Hemicystites.

### ORDER LICHENOCRINOIDEA, *n. ord. and n. fam.*

This division of the fossil Echinodermata, and the family Lichenocrinidæ, are established upon the genus Lichenocrinus.

The definition of the order and family will be the same, as both are founded on a single genus.

The body attached during part or all of its life to foreign objects. It is circular, convex upon the upper side, and more or less crateriform surrounding the central stalk-like appendage. The lower side at some period of life possessed a thin attaching plate. The upper side is covered with numerous polygonal plates, without any evidence of the presence of ambulacra, arms, mouth, pectinated rhombs or pores connecting the exterior with the internal cavity. The interior of the visceral cavity contains numerous radiating



upright lamellæ that support the polygonal plates of the upper side, and often leave their impression, like the radiations of a star, upon the object to which it was attached. The stalk rises from the central depressed area, and consists, at first, of interlocking plates, but, afterward, of circular ones, like those of a crinoid column, and finally tapers to a point. It was flexible and perforated with a longitudinal channel, though the perforation has not been satisfactorily ascertained at the upper terminating point.

#### ORDER MYELODACTYLOIDEA, *n. ord.*

This division of the fossil Echinodermata is established as follows:

Body free, discoidal, and possessed of an internal radiating system of pores, which increase, by division, from the center to a tubular channel in the circular margin or surrounding coil. There are two families referred to this order, the Myelodactylidæ and the Cyclocystoididæ. In the former, the radiating and circular systems become complicated, by the connection, between succeeding coils and through the flattened connecting finger-like processes; in the latter, the arrangement is more simple, as the interior radiations connect with a single marginal circular system. The external form and internal structure are so essentially distinct from other well defined orders, that the technical names, used in description, have no ascertained application. That is, we can not intelligently apply the words calyx, ambulacra, arm, etc., to any part of these peculiar organisms. This order has been suggested with hesitation, because there still exists a possibility that Myelodactylus belongs, in some manner, to the vault of a crinoid, but the author thinks there is not much probability of such connection.

#### FAMILY MYELODACTYLIDÆ, *n. fam.*

This family is founded upon the single genus Myelodactylus, and defined as follows:

Body free, discoidal, and resembling a coil rolled in the same plane, and covered upon either side by finger-like processes from each succeeding turn overlapping the next inner one. The whorls are composed of a series of plates, having a tubular channel within, and perforated and finger-like processes upon the exterior, directed toward the center, and flattened down upon the next inner whorl to which they are attached, and form a porous connection from the tubular channel of one whorl to the next inner one. The cast of the pores of the inner whorl resemble the radiating spokes of a wheel: they are multiplied in connecting the tubular channels of each succeeding whorl, thus making the internal radiating system doubly complicated. The central aperture, if one exists, has not been discovered, and the structure of the terminal end of the anomalous coil is wholly unknown. The internal radiating system of pores may be compared with that of the family Cyclocystoididæ, and here the analogy in structure, with other families in the class Echinodermata, so far as known, ceases. The terminal end of the coil being unknown has led to the suggestion of the possibility of its having been connected with the vault of a crinoid, but as no genus is known having any such appendage, and some classification seeming desirable, this family has been proposed.

#### FAMILY CYCLOCYSTOIDIDÆ, *n. fam.*

This family is founded upon the single genus Cyclocystoides, and defined as follows:

Body free, consisting of a circular disk, and having a margin composed of a series of perforated plates. Within this marginal series the disk is covered with an integument of small plates, except, possibly, a small central aperture. The rim or marginal series contains a tubular channel, making the complete circle, which is connected with the interior, by numerous pores, that radiate from the center, and repeatedly bifurcate before reaching it. The inner side of the rim is grooved, for the reception of the internal part of the disk, and the outer side depressed and scarred, either by mammillary elevations or concave depressions, as if for the attachment of ossicular or other processes. The tubular channel is connected with the exterior by minute circular pores which were probably analogous, in their purpose, to the calycine pores in the Cystidæ.

- ACROCRINUS** *wortheni*, Wachsmuth, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Coal Meas. [Ety. proper name.]
- ACTINOCRINUS** *andrewsanus*, McChesney, 1860, New Pal. Foss., Up. Burlington Gr. [Ety. proper name.] Wachsmuth refers it to *Batocrinus*.
- biturbinatus*, refer to *Batocrinus biturbinatus*.
- brevis*, refer to *Agaricocrinus brevis*.
- calyculus*, refer to *Batocrinus calyculus*.
- calyculus* var. *hardinensis*, refer to *Batocrinus calyculus* var. *hardinensis*.
- caroli*, refer to *Batocrinus caroli*.
- clypeatus*, refer to *Batocrinus clypeatus*.
- concinus*, refer to *Stegancrinus concinus*.
- copei*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Burlington Gr. [Ety. proper name.]
- coreyi* is from the Keokuk Gr., and was described in 1860.
- coronatus*, refer to *Eretmocrinus coronatus*.
- dalyanus*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Burlington Gr. [Ety. proper name.]
- ectypus* instead of *Strotocrinus ectypus*.
- fiscellus*, refer to *Agaricocrinus fiscellus*.
- hageri*, refer to *Batocrinus hageri*.
- helice*, refer to *Agaricocrinus helice*.
- helice* var. *eris*, refer to *Agaricocrinus eris*.
- indianensis* is from the Keokuk Gr. It was described in 1860, and should be referred to *Batocrinus indianensis*.
- leucosia*, refer to *Eretmocrinus leucosia*.
- meeki*, refer to *Macrostylocrinus meeki*.
- multicornis* was described in 1869, from the Up. Held. Gr.
- nashvillæ*, refer to *Batocrinus nashvillæ*.
- nashvillæ* var. *subtractus*, refer to *Batocrinus nashvillæ* var. *subtractus*.
- obpyramidalis*, refer to *Melocrinus obpyramidalis*.
- pentaspinus* was described in 1869, from the Up. Held. Gr.
- pyramidatus*, refer to *Agaricocrinus pyramidatus*.
- pyriformis* var. *rudis*, being preoccupied the fossil was afterward named *Batocrinus pistilliformis*.
- ramulosus*, refer to *Eretmocrinus ramulosus*.
- rotundus*, refer to *Batocrinus rotundus*.
- sculptus*, refer to *Stegancrinus sculptus*.
- sillimani*, is a syn. for *A. scitulus*.
- similis*, refer to *Batocrinus similis*.
- steropes*, refer to *Batocrinus steropes*.
- tenuisculptus*, McChesney, 1867, Chi., Acad. Sci., vol. 1, Low. Burlington Gr. [Sig. finely sculptured.]
- ventricosus*, refer to *Physetocrinus ventricosus*.
- ventricosus* var. *cancellatus*, refer to *Physetocrinus ventricosus* var. *cancellatus*.
- ventricosus* var. *internodus*, refer to *Physetocrinus ventricosus* var. *internodus*.
- setocrinus ventricosus* var. *internodus*.
- ACTINOCRINUS** *wachsmuthi*, White, 1862, syn. for *A. scitulus*.
- wachsmuthi*, White, 1880, 12th Rep. U. S. Geo. Sur. Terr., Keokuk Gr. [Ety. proper name.]
- yandelli*, is from the Keokuk Gr.
- AGARICOCRINUS** *americanus* is found in the Burlington and Keokuk Groups.
- brevis* instead of *Actinocrinus brevis*.
- crassus*, Wetherby, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Keokuk Gr. [Sig. thick.]
- elegans*, Wetherby, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Keokuk Gr. [Sig. elegant.]
- eris*, Hall, 1864, 17th Rep. N. Y. St. Cab. Nat. Hist. (*Actinocrinus helice* var. *eris*), Waverly Gr. [Ety. proper name.]
- fiscellus* instead of *Actinocrinus fiscellus*.
- helice* instead of *Actinocrinus helice*.
- pyramidatus* instead of *Actinocrinus pyramidatus*.
- springeri*, White, 1882, 11th Rep. Geo. & Nat. Hist. Indiana, Keokuk Gr. [Ety. proper name.]
- AGASSIZOCRINUS** *hemisphericus*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kaskaskia Gr. [Sig. hemispherical.]
- papillatus*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kaskaskia Gr. [Sig. shaped like a bud.]
- AGELACRINUS** *septembrachiatus*, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. seven armed.]
- ALLAGECRINUS**, Etheridge & Carpenter, 1881, Ann. & Mag. Nat. Hist. [Ety. *allage*, a change; *krinon*, a lily.]
- carpenteri*, Wachsmuth, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kaskaskia Gr. [Ety. proper name.]
- ALLOPROSALOCRINUS** *euconus*, see *Batocrinus euconus*.
- AMPHERISTOCRINUS**, Hall, 1879, Desc. New Spec. Foss. [Ety. *ampheristos*, doubtful, disputed; *krinon*, a lily.]
- typus*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. the type.]
- AMPHORACRINUS** *planobasalis* was described in 1860, in Supp. to Geo. Rep. Iowa.
- quadrispinus* is a syn. for *A. divergens*.
- AMYGDALOCYSTITES** *huntingtoni*, Wetherby, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Trenton Gr. [Ety. proper name.]
- ANOMALOCRINUS** *caponiformis*, Lyon, 1869, Trans. Am. Phil. Soc., vol. 13, Hud. Riv. Gr. [Sig. capon formed.]
- incurvus* is from the Hud. Riv. Gr.
- ANOMALOCYSTITES** *balanoides* is from the Hud. Riv. Gr.

- Anomaloides*, Ulrich, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1. This is a poorly constructed word for a generic name, beside the fossil is a fragment and not understood.
- reticulatus*, Ulrich, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. reticulated.]
- ARACHNOCRINUS, Meek & Worthen, 1866, Geo. Sur. Ill., vol. 2. [Ety. *arachne*, a spider; *krinon*, a lily.]
- bulbosus, instead of Cyathocrinus bulbosus.
- extensus, Wachsmuth & Springer, 1879, Revision of the Palæocrinoidea, Ham. Gr. [Sig. extended.]
- knappi, Wachsmuth & Springer, 1879, Rev. of the Palæocrinoidea, Ham. Gr. [Ety. proper name.]
- pisiformis, instead of Poteriocrinus pisiformis.
- ARCHÆOCIDARIS dininni, White, 1880, Proc. U. S. Nat. Mus., vol. 2, Up. Coal Meas. [Ety. proper name.]
- keokuk is from the Keokuk Gr.
- triplex, White, 1882, Rep. Carb. Invert. Foss. New Mex., Coal Meas. [Sig. three-fold.]
- ARCHÆOCRINUS, Wachsmuth & Springer, 1881, Proc. Acad. Nat. Sci. [Ety. *archaios*, ancient; *krinon*, a lily.] A generic name proposed for the purpose of including Glyptocrinus lacunosus, G. marginatus, Thysanocrinus microbasilis and T. pyriformis.
- BARYCRINUS angulatus instead of Cyathocrinus angulatus.
- bullatus instead of Cyathocrinus bullatus.
- cornutus instead of Caythocrinus cornutus.
- crassibrachiatus instead of Cyathocrinus crassibrachiatus.
- kelloggi instead of Cyathocrinus kelloggi.
- magister instead of Cyathocrinus magister.
- multibrachiatus instead of Cyathocrinus multibrachiatus.
- rhombiferus instead of Poteriocrinus rhombiferus.
- sculptilis instead of Cyathocrinus sculptilis.
- solidus instead of Cyathocrinus solidus.
- spurius instead of Cyathocrinus spurius.
- stellatus instead of Cyathocrinus stellatus.
- tumidus instead of Cyathocrinus tumidus.
- wachsmuthi instead of Cyathocrinus wachsmuthi.
- BATOCRINUS was described in 1854, by Caseday, in Deutsche Zeitscher d. Geol. Gesellsch., vol. 6.
- andrewsanus instead of Actinocrinus andrewsanus.
- biturbinatus instead of Actinocrinus biturbinatus.
- BATOCRINUS calyculus instead of Actinocrinus calyculus.
- calyculus *var.* hardinensis instead of Actinocrinus calyculus *var.* hardinensis.
- caroli instead of Actinocrinus caroli.
- clypeatus instead of Actinocrinus clypeatus.
- euconus instead of Alloprosallocrinus euconus.
- hageri instead of Actinocrinus hageri.
- indianensis instead of Actinocrinus indianensis.
- lovel, Wachsmuth & Springer, 1881, Proc. Acad. Nat. Sci., Burlington Gr. [Ety. proper name.]
- nashvillæ instead Actinocrinus nashvillæ.
- nashvillæ *var.* subtractus, instead of Actinocrinus nashvillæ *var.* subtractus.
- rotundus instead of Actinocrinus rotundus.
- similis instead of Actinocrinus similis.
- steropes instead of Actinocrinus steropes.
- whitei, Wachsmuth & Springer, 1881, Proc. Acad. Nat. Sci., Keokuk Gr. [Ety. proper name.]
- yandelli instead of Actinocrinus yandelli.
- BELEMNOCRINUS florifer, Wachsmuth & Springer, 1877, Am. Jour. Sci. & Arts, 3d ser., vol. 13, Burlington Gr. [Sig. flower bearing.]
- pourtalei, Wachsmuth & Springer, 1877, Am. Jour. Sci. & Arts, 3d ser., vol. 13, Burlington Gr. [Ety. proper name.]
- CALCOCRINUS radiculus. Ringueberg, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Niagara Gr. [Sig. a small root.]
- Centrocrinus, Wachsmuth & Springer, 1881, Proc. Acad. Nat. Sci. Proposed as a subgenus under Actinocrinus to include A. multicornis and A. pentaspinus, but the name was preoccupied by Austin, in 1843.
- CODASTER graciosus, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2, Keokuk Gr. [Sig. agreeable.]
- hindei, Etheridge & Carpenter, 1882, Ann. & Mag. Nat. Hist., Ham. Gr. [Ety. proper name.]
- kentuckiensis is from the Burlington Gr.
- pentalobus, see Stephanocrinus pentalobus.
- pulchellus, see Stephanocrinus pulchellus.
- CODONITES was described in 1869, in Proc. Acad. Nat. Sci. It is classed by Zittel, Ludwig. Carpenter, and other European authors, as a syn. for Orophocrinus, described by Von Seebach in 1864, in Nachr. k. Gesellsch. zu Göttingen.
- gracilis should bear the same date as the genus.
- CÆLIOCRINUS cariniferus instead of Zeacrinus cariniferus.

- CÆLIOCRINUS** *lyra* instead of *Zeacrinus lyra*.
- COMAROCYSTITES** *shumardi*, var. *obconicus*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci., Trenton Gr. [Sig. obconical.]
- CORDYLOCRINUS**, Angelin, 1878, Icon. Crin. Suec. [Ety. *kordyle*, a cudgel; *krinon*, a lily.]
- parvus* instead of *Platycrinus parvus*.
- plumosus* instead of *Platycrinus plumosus*.
- ramulosus* instead of *Platycrinus ramulosus*.
- Crinosoma antiqua*, Castelnan, 1843, Syst. Sil. Probably a fucoid.
- CROMYOCRINUS**, Trautschold, 1867, Crin. jung. Bergkalkes bei Moskaw. [Ety. *kromyon*, an onion; *krinon*, a lily.]
- gracilis*, Wetherby, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2, Kaskaskia Gr. [Sig. slender.]
- CUPULOCRINUS**, D'Orbigny, 1850, Prodr. d. Pal. Proposed instead of *Scyphocrinus*, Hall, that was preoccupied.
- heterocostalis* instead of *Scyphocrinus heterocostalis*.
- CYATHOCRINUS** *aemulus*, Hall, 1879, Desc. new spec. foss., Niagara Gr. [Sig. emulous.]
- angulatus* refer to *Barycrinus angulatus*.
- barydactylus*, Wachsmuth & Springer, 1878, Proc. Acad. Nat. Sci., Up. Burlington Gr. [Sig. heavy fingered.]
- bulbosus* refer to *Barycrinus bulbosus*.
- crassibrachiatus* refer to *Barycrinus crassibrachiatus*.
- crassus* refer to *Eupachycrinus crassus*.
- crawfordsvillensis*, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Keokuk Gr. [Ety. proper name.]
- decadactylus* was described in 1860, Am. Jour. Sci., vol. 29, and from the Keokuk Gr.
- fasciatus* refer to *Macrostylocrinus fasciatus*.
- gilesi*, Wachsmuth & Springer, 1878, Proc. Acad. Nat. Sci., Burlington Gr. [Ety. proper name.]
- hamiltonensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Ety. proper name.]
- harrisi*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2, Keokuk Gr. [Ety. proper name.]
- harrodi*, Wachsmuth & Springer, 1879, Proc. Acad. Nat. Sci., Keokuk Gr. [Ety. proper name.]
- hexadactylus* was described in 1860, from the Keokuk Gr.
- inaequidactylus*, Whitfield, 1882, Desc. New Sp. Foss. from Ohio, Kaskaskia Gr. [Sig. unequal fingered.]
- inflexus*, Geinitz, refer to *Erisocrinus inflexus*.
- insperatus* is from the Keokuk Gr.
- kelloggi*, refer to *Barycrinus kelloggi*.
- magister*, refer to *Barycrinus magister*.
- CYATHOCRINUS** *marshallensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kinderhook Gr. [Ety. proper name.]
- multibrachiatus*, refer to *Barycrinus multibrachiatus*.
- nucleus* instead of *Dendrocrinus nucleus*.
- pusillus*, refer to *Lecanocrinus pusillus*.
- rarus* was described in 1869, from the Up. Held. Gr.
- sangamonensis*, refer to *Eupachycrinus sangamonensis*.
- sculptilis*, refer to *Barycrinus sculptilis*.
- solidus*, refer to *Barycrinus solidus*.
- somersi*, Whitfield, 1882, Desc. New Spec. from Ohio Coal Meas. [Ety. proper name.]
- spurius*, refer to *Barycrinus spurius*.
- stellatus*, refer to *Barycrinus stellatus*.
- stillativus*, White, 1880, Proc. U. S. Nat. Mus., vol. 2, Up. Coal Meas. [Sig. dropping.]
- tenuibrachiatus*, Lyon, 1869, Trans. Am. Phil. Soc., vol. 13, Up. Held. Gr. [Sig. slender armed.]
- tumidus*, see *Barycrinus tumidus*.
- vanhornei*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Niagara Gr. [Ety. proper name.]
- wachsmuthi*, see *Barycrinus wachsmuthi*.
- waldronensis*, Miller & Dyer, 1878, Cont. to Pal. No. 2, Niagara Gr. [Ety. proper name.]
- CYCLOCYSTOIDES** *bellulus*, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. beautiful.]
- magnus*, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. large.]
- minus*, Miller & Dyer, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. small.]
- mundulus*, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. neat, trim.]
- parvus*, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. little.]
- CYTOCRINUS** may be restored, as it is doubtful about its being a syn. for *Macrostylocrinus*.
- DENDROCRINUS** *ancilla*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. a hand-maid.]
- curtus*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Utica Slate Gr. [Sig. short.]
- erraticus*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Hud. Riv. Gr. [Sig. a wanderer.]
- navigiolium*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Utica Slate Gr. [Sig. a small vessel.]
- nucleus*, refer to *Cyathocrinus nucleus*.
- Decadocrinus*, Wachsmuth & Springer, 1879, Proc. Acad. Nat. Sci. [Ety. *dekas*, number of ten; *krinon*, a lily.] A proposed subgenus of *Poteriocrinus*.

*DICHOCRINUS constrictus* is from the Warsaw Group.

*coxanus*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Ety. proper name.]

*elegans*, Casseday & Lyon, was preoccupied by De Koninck & Lehon in 1853, but the species is referred to the genus *Talarocrinus*, by Wachsmuth & Springer.

*hamiltonensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Ety. proper name.]

*ornatus*, Wachsmuth & Springer, 1881, Proc. Acad. Nat. Sci., Keokuk Gr. [Sig. ornate.] This name was proposed instead of *D. sculptus*, Casseday & Lyon, because the latter name was preoccupied.

*sculptus*, Casseday & Lyon. The name was preoccupied by De Koninck & Lehon in 1853, see *D. ornatus*.

*DOLATOCRINUS marshi* was described in 1869, Trans. Am. Phil. Soc., vol. 13, Up. Held. Gr.

*ornatus*, Meek, 1871, Proc. Acad. Nat. Sci., Corniferous Gr. [Sig. ornamented.]

*DORYCRINUS*, Römer, 1854, Archiv. f. Naturgesch. Jahrg., vol. 19, p. 207.

*lineatus*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Burlington Gr. [Sig. lined.]

*ERETMOCRINUS adultus*, Wachsmuth & Springer, 1881, Proc. Acad. Nat. Sci., Keokuk Gr. [Sig. adult.]

*coronatus* instead of *Actinocrinus coronatus*.

*intermedius*, Wachsmuth & Springer, 1881, Proc. Acad. Nat. Sci., Keokuk Gr. [Sig. intermediate.]

*leucosia* instead of *Actinocrinus leucosia*. *originarius*, Wachsmuth & Springer, 1881, Proc. Acad. Nat. Sci., Keokuk Gr. [Sig. original.]

*ramulosus* instead of *Actinocrinus ramulosus*.

*varsouviensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Warsaw Gr. [Ety. proper name.]

*ERISOCRINUS hemisphericus* instead of *Poteroocrinus hemisphericus*.

*inflexus*, Geinitz, 1866 (*Cyathocrinus inflexus*), Carb. und Dyas, Coal Meas. [Sig. curving.]

*planus*, White, 1880, Proc. U. S. Nat. Mus., Coal Meas. [Sig. even.]

*EUCALYPTOCRINUS constrictus*, Hall, 1879, syn. for *E. tuberculatus*.

*depressus*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Niagara Gr. [Sig. depressed.]

*egani*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Niagara Gr. [Ety. proper name.]

*ovalis* instead of *ovatus*.

*proboscidalis*, S. A. Miller, 1882, Jour.

Cin. Soc. Nat. Hist., vol. 5, Niagara Gr. [Sig. having a proboscis.]

*EUCALYPTOCRINUS rotundus*, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Niagara Gr. [Sig. rotund.]

*tuberculatus*, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Niagara Gr. [Sig. tuberculated.]

*turbinatus*, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Niagara Gr. [Sig. turbate.]

*EUCLADOCRINUS*, Meek, 1871, U. S. Geo. Sur. Terr. [Ety. *eu*, very; *klados*, a branch; *krinon*, a lily.]

*millebrachiatus*, Wachsmuth & Springer, 1878, Proc. Acad. Nat. Sci., Burlington and Keokuk Gr. [Sig. many-armed.]

*montanensis*, Meek, 1871, Hayden's Rep. U. S. Geo. Sur. Terr., Subcarboniferous. [Ety. proper name.]

*pleuroviminus* instead of *Platycrinus pleuroviminus*.

*EUPACHYCRINUS asperatus*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kaskaskia, Gr. [Sig. roughened.]

*crassus* instead of *Cyathocrinus crassus*. *formosus* instead of *Zeacrinus formosus*.

*germanus*, S. A. Miller, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Kaskaskia Gr. [Sig. near of kin.]

*monroensis*, Worthen, 1882, Bull. No. 1, St. Mus. Nat. Hist., Kaskaskia Gr. [Ety. proper name.]

*quatuordecembrachialis* instead of *Graphiocrinus quatuordecembrachialis*, and from Kaskaskia Gr.

*sangamonensis* instead of *Cyathocrinus sangamonensis*.

*spartarius*, S. A. Miller, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Kaskaskia Gr. [Sig. of or belonging to a broom.]

*subtumidus* instead of *Zeacrinus subtumidus*.

*FORBESIOCRINUS asteriformis*, refer to *Onychocrinus asteriformis*.

*communis*, refer to *Taxocrinus communis*. *giddingi*, refer to *Taxocrinus giddingi*.

*juvenis*, refer to *Taxocrinus juvenis*.

*kelloggi*, refer to *Taxocrinus kelloggi*.

*lobatus*, refer to *Taxocrinus lobatus*.

*lobatus* var. *tardus*, refer to *Taxocrinus lobatus* var. *tardus*.

*meeki*, refer to *Taxocrinus meeki*, from Keokuk Gr.

*multibrachiatus*, refer to *Taxocrinus multibrachiatus*.

*parvus*, Wetherby, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Kaskaskia Gr. [Sig. small.]

*ramulosus*, refer to *Onychocrinus ramulosus*.

*shumardanus*, refer to *Taxocrinus shumardanus*.

*whitfieldi*, refer to *Taxocrinus whitfieldi*. *Gennæocrinus*, Wachsmuth & Springer, 1882, Proc. Acad. Nat. Sci. [Ety. *gennaios*, of noble origin; *krinon*, a lily.] This

was proposed to include certain species of *Actinocrinus* from the Hamilton Group, to-wit: *A. calypso*, *A. casedayi*, *A. cauliculus*, *A. eucharis*, *A. kentuckiensis*, and *A. nyssa*.

**GLYPTASTER** *egani*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Niagara Gr. [Ety. proper name.]

*occidentalis*, var. *crebescens*, Hall, 1879, 28th Reg. Rep., Niagara Gr. [Sig. abundant.]

**GLYPTOCRINUS** *angularis*, Miller & Dyer, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. angular.]

*cognatus*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Hud. Riv. Gr. [Sig. near to, cognate.]

*dyeri*, var. *sublaevis*, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. somewhat smooth.]

*gracilis*, Wetherby, 1881 (*Reteocrinus gracilis*), Jour. Cin. Soc. Nat. Hist., vol. 4, Hud. Riv. Gr. [Sig. slender.]

*harrisi*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Ety. proper name.]

*miamiensis*, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Ety. proper name.]

*pattersoni*, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Utica Slate Gr. [Ety. proper name.]

*richardsoni*, Wetherby, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Ety. proper name.]

*sculptus*, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. carved.]

*shafferi* var. *germanus*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Hud. Riv. Gr. [Sig. near of kin.] I believe this is a distinct species, and will therefore become *G. germanus*.

**GRANATOCRINUS** *missouriensis* and *G. remeri*, should be referred to the Choteau or Kinderhook Gr.

**GRAPHIOCRINUS** *carbonarius* instead of *Scaphiocrinus carbonarius*.

*meadamsi* instead of *Scaphiocrinus meadamsi*.

*quatuordecembrachialis*, refer to *Eupachyrinus quatuordecembrachialis*, and to the Kaskaskia Gr.

*rudis* instead of *Scaphiocrinus rudis*.  
*simplex* instead of *Scaphiocrinus simplex*.

*spinobrachiatus* instead of *Scaphiocrinus spinobrachiatus*.

*striatus* instead of *Scaphiocrinus striatus*.

*tortuosus* instead of *Scaphiocrinus tortuosus*.

*wachsmuthi* instead of *Scaphiocrinus wachsmuthi*.

**HETEROCRINUS** *crassus*, refer to *Iocrinus crassus*.

*geniculatus*, Ulrich, 1879, Jour. Cin.

Soc. Nat. Hist., vol. 2, Utica Slate Gr. [Sig. geniculated.]

**HETEROCRINUS** *milleri*, Wetherby, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Trenton Gr. [Ety. proper name.]

*œhanus*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Ety. proper name.]

*pentagonus*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. pentagonal.]

*suberassus*, refer to *Iocrinus suberassus*.  
*vaupeli*, Wetherby, 1881. I am unable to recognize this species. It appears to be founded upon a fragment of *H. simplex*.

**HOLOCYSTITES** *baculus*, S. A. Miller, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Niagara Gr. [Sig. a staff.]

*brauni*, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Niagara Gr. [Ety. proper name.]

*dyeri*, S. A. Miller, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Niagara Gr. [Ety. proper name.]

*elegans*, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Niagara Gr. [Sig. elegant.]

*globosus*, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Niagara Gr. [Sig. globose.]

*jolietensis*, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Niagara Gr. [Ety. proper name.]

*ornatus*, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Niagara Gr. [Sig. ornate.]

*perlongus*, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Niagara Gr. [Sig. very long.]

*plenus*, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Niagara Gr. [Sig. full, large.]

*pustulosus*, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Niagara Gr. [Sig. full of pustules.]

*rotundus*, S. A. Miller, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Niagara Gr. [Sig. rotund.]

*subrotundus*, S. A. Miller, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Niagara Gr. [Sig. subrotund.]

*tumidus*, S. A. Miller, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Niagara Gr. [Sig. tumid.]

*turbinatus*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2, Niagara Gr. [Sig. turbinate.]

*ventricosus*, S. A. Miller, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Niagara Gr. [Sig. ventricose.]

*wetherbyi*, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Niagara Gr. [Ety. proper name.]

**HOMOCRINUS** *angustatus* instead of *angustus*, from Hud. Riv. Gr.

**HYBOCYSTITES**, Wetherby, 1880, Jour. Cin.

- Soc. Nat. Hist., vol. 3. [Ety. *hubos*, hump-backed; *kustis*, a bladder.]
- HYBOCYSTITES** problematicus, Wetherby, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Trenton Gr. [Sig. problematical.]
- HYDREIONOCRINUS**, De Koninck, 1858, Bull. Acad. Royale Belgique, 2me serie, tome 3. Messrs. Wachsmuth & Springer refer to this genus *Zeacrinus acanthophorus*, *Z. armiger*, *Z. depressus*, *Z. discus* and *Z. mucrospinus*.
- ICHTHYOCRINUS** nobilis, Wachsmuth & Springer, 1878, Proc. Acad. Nat. Sci., Upper Burlington and Keokuk Gr. [Sig. noble.]
- IOCRINUS**, Hall, 1864, Advance sheets, 24th Reg. Rep. N. Y. [Ety. *io*, in triumph; *krinon*, a lily.]
- crassus* instead of *Heterocrinus crassus*.  
*subcrassus* instead of *Heterocrinus*, *subcrassus*.
- LAMPTEROCRINUS** parvus, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. little.]
- LECANOCRINUS** pusillus, Hall, 1863 (*Cyathocrinus pusillus*) Trans. Alb. Inst., vol. 4, Niagara Gr. [Sig. very small.]
- pusillus*, Winchell & Marcy, syn. for *L. pusillus*, Hall.
- Lecythiocrinus*, White, 1880, Proc. U. S. Nat. Mus., vol. 2. [Ety. *lekuthion*, a small oil flask; *krinon*, a lily.] This name was preoccupied by Muller in 1858, and by Zittel in 1879.
- adamsi*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Coal Meas. [Ety. proper name.]
- olliculaformis*, White, 1880, Proc. U. S. Nat. Mus., vol. 2, Upper Coal Meas. [Sig. like a little pot.]
- LEPIDESTHES** colletti, White, 1878, Proc. Acad. Nat. Sci., Keokuk Gr. [Ety. proper name.]
- formosus*, S. A. Miller, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Keokuk Gr. [Sig. beautiful.]
- LICHENOCRINUS** affinis, S. A. Miller, 1882, Jour., Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. related to, from resemblance to *L. crateriformis*.]
- dubius*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Utica Slate Gr. [Sig. doubtful.]
- pattersoni*, S. A. Miller, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Utica Slate Gr. [Ety. proper name.]
- LYRIOCRINUS** melissa instead of *Rhodocrinus melissa*.
- sculptus*, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Niagara or Low. Held. Gr. [Sig. sculptured.]
- MACROSTYLOCRINUS** fasciatus instead of *Cyathocrinus fasciatus*.
- fusibrachiatus*, Ringueberg, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Niagara Gr. [Sig. from the fusiform arms.]
- meeki* instead of *Actinoocrinus meeki*.  
*striatus* var. *granulosus*, Hall, 1879, 28th Reg. Rep., Niagara Gr. [Sig. granulous.]
- MARSUPIOCRINUS** tennesseensis instead of *Platycrinus tennesseensis*.  
*tentaculatus* instead of *Platycrinus tentaculatus*.
- MEGISTOCRINUS** infelix, refer to *Saccoocrinus infelix*.  
*marcouanus*, refer to *Saccoocrinus marcouanus*.  
*necis*, refer to *Saccoocrinus necis*.  
*nodosus*, Barris, 1879, Proc. Davenport Acad., Nat. Sci., Up. Held. Gr. [Sig. nodose.]
- parvirostris* is a syn. for *M. plenus*.  
*pileatus*, S. A. Miller, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Up. Held. Gr. [Sig. covered with a cap.]
- spinus* should be stricken out.
- MELOCRINUS** clarkii, Williams, 1882, Proc. Acad. Nat. Sci., Chemung Gr. [Ety. proper name.]
- obpyramidalis*, Winchell & Marcy, 1865 (*Actinoocrinus obpyramidalis*), Mem. Bost. Soc. Nat. Hist., vol. 1, Niagara Gr. [Sig. obpyramidal.]
- MYELODACTYLUS** bridgeportensis, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Niagara Gr. [Ety. proper name.]
- OLIGOPORUS** coreyi, Meek & Worthen, 1870, Proc. Acad. Nat. Sci., Keokuk Gr. [Ety. proper name.]
- Ollacrinus*, Cumberland, 1826, Appendix to Reliquiæ Conservata. Figured without description, and subsequently declared by Koninck & Lehon to be a *Rhodocrinus*. Wachsmuth & Springer claim priority for this name over *Goniasteroidocrinus*, without good reason, however, and contrary to the laws of nomenclature, as shown by Meek in Ill. Geo. Sur., vol. 2, p. 217.
- ONYCHOCRINUS** asteriæformis instead of *Forbesiocrinus asteriæformis*.  
*distensus*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kaskaskia Gr. [Sig. distended.]
- meeki*, refer to *Taxocrinus meeki*, and to Keokuk Gr.
- ramulosus* instead of *Forbesiocrinus ramulosus*.  
*whitfieldi*, refer to *Taxocrinus whitfieldi*.
- PACHYLOCRINUS**, Wachsmuth & Springer, 1879, Proc. Acad. Nat. Sci. [Ety. *pachylos*, thick; *krinon*, a lily.] A proposed subgenus of *Poteriocrinus*, founded upon the form of the body.
- PALÆASTER** clarkianus, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Hud. Riv. Gr. [Ety. proper name.]
- clarkii*, S. A. Miller, refer to *Palæaster clarkianus*.
- crawfordsvillensis*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2, Keokuk Gr. [Ety. proper name.]
- dubius*, Miller & Dyer, 1878, Cont. to



- Pal., No. 2, Utica Slate Gr. [Sig. doubtful.]
- PALÆASTER** exulptus, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Hud. Riv. Gr. [Sig. chiseled out.]
- finei*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Utica Slate Gr. [Ety. proper name.]
- harrisi*, S. A. Miller, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Ety. proper name.]
- longibrachiatus*, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. long armed.]
- miamiensis*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Hud. Riv. Gr. [Ety. proper name.]
- simplex*, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. simple.]
- spinulosus*, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. full of spines.]
- PALÆASTERINA** *approximata*, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. near to.]
- speciosa*, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. beautiful.]
- Parisocrinus*, Wachsmuth & Springer, 1879, Proc. Acad. Nat. Sci. [Ety. *parisos*, resembling; *krinon*, a lily.] A proposed subgenus under *Poteriocrinus*.
- PENTREMITES** *angularis*, and *P. robustus*, are from the Kaskaskia Group.
- bipyramidalis*, *P. clavatus*, *P. grosveneri*, *P. lineatus*, *P. reinwardti*, *P. subcylindricus*, *P. subtruncatus*, and *P. wortheni*, are referred to the subgenus *Troostocrinus*.
- abbreviatus*, Hambach, 1880, Trans. St. Louis Acad. Sci., vol. 4, Kaskaskia Gr. [Sig. abbreviated.]
- basilaris*, Hambach, 1880, Trans. St. Louis Acad. Sci., vol. 4, Kaskaskia Gr. [Sig. relating to the base.]
- broadheadi*, Hambach, 1880, Trans. St. Louis Acad. Sci., vol. 4, Kaskaskia Gr. [Ety. proper name.]
- chesterensis*, Hambach, 1880, Trans. St. Louis Acad. Sci., vol. 4, Kaskaskia Gr. [Ety. proper name.]
- clavatus*, Hambach, 1880, Trans. St. Louis Acad. Sci., vol. 4, Kaskaskia Gr. [Sig. clavated.]
- hemisphericus*, Hambach, 1880, Trans. St. Louis Acad. Sci., vol. 4, Kaskaskia Gr. [Sig. hemispherical.]
- nodosus*, Hambach, 1880, Trans. St. Louis Acad. Sci., vol. 4, Kaskaskia Gr. [Sig. nodose.]
- potteri*, Hambach, 1880, Trans. St. Louis Acad. Sci., vol. 4, Burlington Gr. [Ety. proper name.]
- spinosus*, Hambach, 1880, Trans. St. Louis Acad. Sci., vol. 4, Kaskaskia Gr. [Sig. spinous.]
- sulcatus*, is said by Hambach to be a syn. for *P. laterniformis*. The latter was founded upon a cast.
- Pereichocrinus*, Austin, 1843, Ann. & Mag. Nat. Hist., vol. 11. Not defined so as to be recognized, though some authors, disregarding the rules of nomenclature, have used the name in an attempt to supplant, with it, *Saccocrinus*.
- PHYSETOCRINUS** *ornatus* instead of *Actinocrinus ornatus*.
- ventricosus* instead of *Actinocrinus ventricosus*.
- ventricosus* var. *cancellatus* instead of *Actinocrinus ventricosus* var. *cancellatus*.
- ventricosus* var. *internodus* instead of *Actinocrinus ventricosus* var. *internodus*.
- reticulatus* instead of *Actinocrinus reticulatus*.
- PISOCRINUS**, DeKoninck, 1858, Bull. Acad. Roy. Belgique, 2me ser., tome 3. [Ety. *pisos*, a pea; *krinon*, a lily.]
- gemmaformis*, S. A. Miller, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Niagara Gr. [Sig. bud shaped.]
- PLATYCRINUS** *bloomfieldensis*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2, Keokuk Gr. [Ety. proper name.]
- bonoensis*, White, 1878, Proc. Acad. Nat. Sci., Keokuk Gr. [Ety. proper name.]
- leai* was described in 1869, Trans. Am. Phil. Soc., vol. 13, from Up. Held. Gr. *monroensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., St. Louis Gr. [Ety. proper name.]
- montanaensis*, refer to *Eucladocrinus montanensis*.
- multibrachiatus*, is from the Burlington Group.
- ornigranulus*, McChesney, 1860, Desc. New Pal. Foss., Burlington Gr. [Sig. having granules.]
- parvus*, refer to *Cordylocrinus parvus*.
- pleurovimineus*, refer to *Eucladocrinus pleurovimineus*.
- plumosus*, refer to *Cordylocrinus plumosus*.
- poculum*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Burlington Gr. [Sig. a cup.]
- praenuntius*, Wachsmuth & Springer, 1878, Proc. Acad. Nat. Sci., Burlington Gr. [Sig. a harbinger.]
- pratteni*, Worthen, 1860, Trans. St. Louis Acad. Sci., Burlington Gr. [Ety. proper name.]
- ramulosus*, refer to *Cordylocrinus ramulosus*.
- siluricus*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Ety. proper name.]
- tennesseensis*, refer to *Marsupiocrinus tennesseensis*.
- tentaculatus*, refer to *Marsupiocrinus tentaculatus*.
- vexabilis*, white, 1875, Wheeler's U. S.

- Sur. W. 100th. Meridian, Subcarboniferous. [Sig. disturbed.]
- POROCRINUS** *crassus*, is from the Hud. Riv. Gr., and *P. pentagonus*, from the Trenton Gr.
- smithi*, Grant, 1831, Trans. Ottawa Field Naturalists' Club, No. 2, Trenton Gr. [Ety. proper name.]
- POTERIOCRINUS** *anomalos*, Wetherby, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Kaskaskia Group. [Sig. anomalous.]
- arachnaeformis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Sig. spider-like.]
- asper*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Sig. rough.]
- asperatus*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Sig. made rough, uneven.]
- briareus*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Ety. mythological name.]
- burketi*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Ety. proper name.]
- calyx*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. a cup.]
- clarkei*, Williams, 1882, Proc. Acad. Nat. Sci., Chemung Gr. [Ety. proper name.]
- claytonensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Warsaw Gr. [Ety. proper name.]
- clytis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., St. Louis Gr. [Ety. proper name.]
- columbiensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kaskaskia Gr. [Ety. proper name.]
- cornellianus*, Williams, 1882, Proc. Acad. Nat. Sci., Chemung Gr. [Ety. proper name.]
- coxanus*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Ety. proper name.]
- cylindricus* was described in 1869 from the Up. Held. Gr.
- davisanus*, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Up. Held. Gr. [Ety. proper name.]
- fountainensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., St. Louis Gr. [Ety. proper name.]
- gregarius*, Williams, 1882, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. gregarious.]
- hamiltonensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Ety. proper name.]
- hemisphericus*, refer to *Erisocrinus hemisphericus*
- illinoisensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Warsaw Gr. [Ety. proper name.]
- iowensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Ety. proper name.]
- POTERIOCRINUS** *jesupi*, Whitfield, 1881, Bull. No. 1, Ann. Mus. Nat. Hist., Burlington Gr. [Ety. proper name.]
- kaskaskensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kaskaskia Gr. [Ety. proper name.]
- latidactylus*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Sig. wide armed.]
- milleri*, Wetherby, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Kaskaskia Gr. [Ety. proper name.]
- nauvoensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Ety. proper name.]
- occidentalis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Sig. western.]
- okawensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kaskaskia Gr. [Ety. proper name.]
- orestes*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Ety. proper name.]
- otterensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Ety. proper name.]
- peculiaris*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kaskaskia Gr. [Sig. peculiar.]
- penicilliformis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Sig. like a painter's brush.]
- pisiformis*, refer to *Arachnocrinus pisiformis*.
- popensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kaskaskia Gr. [Ety. proper name.]
- posticus*, refer to *Dendrocrinus posticus*.
- propinquus*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kaskaskia Gr. [Sig. near to.]
- rhomboferus*, refer to *Baryocrinus rhombiferus*.
- richfieldensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kinderhook Gr. [Ety. proper name.]
- salteri*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kaskaskia Gr. [Ety. proper name.]
- sculptus*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kaskaskia Gr. [Sig. sculptured.]
- similis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Sig. similar.]
- simplex* was described in 1869 from the Up. Held. Gr.
- spinobrachiatus*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kaskaskia Gr. [Sig. spine armed.]
- subramulosus*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Sig. somewhat full of branches.]
- talboti*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., St. Louis Gr. [Ety. proper name.]
- tentaculatus*, Worthen, 1882, Bull. No. 1,

- Ill. St. Mus. Nat. Hist., Keokuk Gr. [Sig. tentacled.]
- POTERIOCRINUS** *tenuidactylus*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Sig. slender-fingered.]
- validus*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Warsaw Gr. [Sig. strong.]
- varsouviensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Warsaw Gr. [Ety. proper name.]
- venustus*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kaskaskia Gr. [Sig. beautiful.]
- wachsmuthi* refer to *Graphiocrinus wachsmuthi*.
- wetherbyi*, S. A. Miller, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Kaskaskia Gr. [Ety. proper name.]
- zethus*, Williams, 1882, Proc. Acad. Nat. Sci., Chemung Gr. [Ety. mythological name.]
- PROTASTER** *flexuosus*, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Utica Slate and Hud. River Gr. [Sig. full of turnings.]
- miamiensis*, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Ety. proper name.]
- Protasterina*, Ulrich, syn. for *Protaster*.
- fimbriata*, Ulrich, syn. for *Protaster flexuosus*.
- PTEROTOCRINUS** *acutus*, Wetherby, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Kaskaskia Gr. [Sig. acute.]
- bifurcatus*, Wetherby, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Kaskaskia Gr. [Sig. bifurcated.]
- cornigerus*, refer to *Talarocrinus cornigerus*.
- sexlobatus*, refer to *Talarocrinus sexlobatus*.
- spatulatus*, Wetherby, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Kaskaskia Gr. [Sig. spatulate.]
- RETIOCRINUS** *gracilis*, Wetherby, see *Glyptocrinus gracilis*.
- RHODOCRINUS** *coxanus*, Worthen, 1882, Bull., No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Ety. proper name.]
- melissa*, refer to *Lyriocrinus melissa*.
- vesperalis*, White, 1880, Proc. U. S., Nat. Mus., vol. 2, Upper Coal Meas. (?) [Sig. belonging to evening.]
- SACCOCRINUS** *egani*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Niagara Gr. [Ety. proper name.]
- infelix*, Winchell & Marcy, 1865 (*Megistocrinus infelix*), Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Sig. unhappy.]
- marcouanus*, Winchell & Marcy, 1865 (*Megistocrinus marcouanus*), Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Ety. proper name.]
- necis*, Winchell & Marcy, 1865 (*Megistocrinus necis*), Mem. Bost. Soc. Nat. Hist., Niagara Gr. [Sig. death.]
- SACCOCRINUS** *pyriformis*, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Niagara Gr. [Sig. pear shaped.]
- urniformis*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Niagara Gr. [Sig. urn shaped.]
- SCAPHIOCRINUS** *carbonarius*, refer to *Graphiocrinus carbonarius*.
- gibsoni*, White, 1878, Proc. Acad. Nat. Sci., Keokuk Gr. [Ety. proper name.]
- gurleyi*, White, 1878, Proc. Acad. Nat. Sci., Keokuk Gr. [Ety. proper name.]
- macadamsi*, refer to *Graphiocrinus macadamsi*.
- rudis*, refer to *Graphiocrinus rudis*.
- simplex*, refer to *Graphiocrinus simplex*.
- spinifer*, Wetherby, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Kaskaskia Gr. [Sig. spine bearing.]
- spinobrachiatus*, refer to *Graphiocrinus spinobrachiatus*.
- striatus*, refer to *Graphiocrinus striatus*.
- tortuosus*, refer to *Graphiocrinus tortuosus*.
- wachsmuthi*, refer to *Graphiocrinus wachsmuthi*.
- Scyphocrinus*, Hall. This name was preoccupied by Zenker in 1833, and D'Orbigny proposed instead of it *Cupulocrinus*.
- heterocostalis* refer to *Cupulocrinus heterocostalis*.
- Scytalocrinus* *Wachsmuth & Springer*, 1879, Proc. Acad. Nat. Sci. [Ety. *skutale*, a staff or club; *krinon*, a lily.] A subgenus of *Poteriocrinus* of doubtful utility.
- wachsmuthi*, Wetherby, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Kaskaskia Gr. [Ety. proper name.]
- STEGANOCRINUS** *concinus* instead of *Actinocrinus concinus*
- sculptus*, Hall, instead of *Actinocrinus sculptus*.
- STEPHANOCRINUS** *osgoodensis*, S. A. Miller, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Niagara Gr. [Ety. proper name.]
- pentalobus*, Hall, 1879 (*Codaster pentalobus*); Desc. New Spec. Foss., Niagara Gr. [Sig. five lobed.]
- pulchellus*, Miller & Dyer, 1878 (*Codaster pulchellus*), Jour. Cin. Soc. Nat. Hist., vol. 1, Niagara Gr. [Sig. beautiful.]
- STEREOCRINUS**, Barris, 1879, Proc. Davenport Acad. Sci., vol. 2. [Ety. *stereos*, firm; *krinon*, a lily.]
- triangular*, Barris, 1879, Proc. Davenport Acad. Sci., vol. 2, Upper Helderberg Gr. [Sig. triangular.]
- triangulatus* var. *liberatus*, Barris, 1879, Proc. Davenport Acad. Sci., vol. 2, Upper Helderberg Gr. [Sig. furrowed.]

- STROTOCRINUS bloomfieldensis, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 2, Keokuk Gr. [Ety. proper name.] *ectypus*, refer to Actinocrinus *ectypus*.
- SYNBATHOCRINUS granuliferus, Wetherby, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2, Kinderhook Gr. [Sig. granule bearing.] *oweni* is from the Kinderhook Gr. *robustus* is from the Keokuk Gr.
- TÆNIASTER elegans, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. elegant.]
- TALAROCRINUS, Wachsmuth & Springer, 1881, Proc. Acad. Nat. Sci. [Ety. *taleros*, a basket; *krinon*, a lily.] *cornigerus* instead of Dichocrinus *cornigerus*. *elegans* instead of Dichocrinus *elegans*. *ovatus*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kaskaskia Gr. [Sig. ovate.] *sexlobatus* instead of Dichocrinus *sexlobatus*. *symmetricus* instead of Dichocrinus *symmetricus*.
- TAXOCRINUS communis instead of Forbesiocrinus *communis*. *curtus*, Williams, 1882, Proc. Acad. Nat. Sci., Chemung Gr. [Sig. short.] *fletcheri*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Ety. proper name.] *giddingi* instead of Forbesiocrinus *giddingi*. *ithacensis*, Williams, 1882, Proc. Acad. Nat. Sci., Chemung Gr. [Ety. proper name.] *juvenis* instead of Forbesiocrinus *juvenis*. *kelloggi* instead of Forbesiocrinus *kelloggi*. *lobatus* instead of Forbesiocrinus *lobatus*. *lobatus* var. *tardus* instead of Forbesiocrinus *lobatus* var. *tardus*. *meeki* instead of Forbesiocrinus *meeki*. *multibrachiatus* instead of Forbesiocrinus *multibrachiatus*.
- TAXOCRINUS multibrachiatus var. *colletti*, White, 1881, 2d Ann. Rep. Bureau of Statistics of Indiana, Keokuk Gr. [Ety. proper name.] *shumardanus* instead of Forbesiocrinus *shumardanus*. *whitfieldi* instead of Forbesiocrinus *whitfieldi*.
- Teleiocrinus, Wachsmuth & Springer, 1881, Proc. Acad. Nat. Sci. [Ety. *teleios*, perfect; *krinon*, a lily.] A subgenus of Strotocrinus, of doubtful utility.
- TROOSTOCRINUS, Shumard, 1865, Trans. St. Louis Acad. Sci., vol. 2. [Ety. proper name.] A proposed subgenus of Pentremites.
- VASOCRINUS lyoni, instead of Cyathocrinus *lyoni*. *macropleurus* instead of Cyathocrinus *macropleurus*.
- XENOCRINUS, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4. [Ety. *xenos*, strange, new; *krinon*, a lily.] *penicillus*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Hud. Riv. Gr. [Sig. a painter's brush.]
- ZEACRINUS cariniferus, refer to Cœliocrinus *cariniferus*. *compactilis* is from the Kaskaskia Gr. *coxanus*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Ety. proper name.] *crassus*, refer to Eupachycrinus *crassus*. *formosus*, refer to Eupachycrinus *formosus*. *keokuk*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Keokuk Gr. [Ety. proper name.] *lyra*, refer to Cœliocrinus *lyra*. *moorei*, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Coal Meas. [Ety. proper name.] *pikensis*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Burlington Gr. [Ety. proper name.] *subtumidus*, refer to Eupachycrinus *subtumidus*.

## SUBKINGDOM MOLLUSCA.

## CLASS BRYOZOA.

- ACANTHOCLODIA**, King, 1849, Ann. & Mag. Nat. Hist., 2d ser., vol. 3, p. 389. [Ety. *akantha*, a spine; *klados*, a branch.]  
*americana*, Swallow, 1858, Trans. St. Louis Acad. Sci., vol. 1, Permian. [Ety. proper name.]
- ALECTO** was preoccupied by Leach in the class Echinodermata, when Lamoureaux used it, and hence Stomatopora is used in its place.  
*canadensis*, see *Aulopora canadensis*.
- AMPLEXOPORA**, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. [Ety. *amplexus*, an encircling; *porus*, a pore.]  
*cingulata*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. encircled.]  
*septosa*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2 (Atactopora septosa), Hud. Riv. Gr. [Sig. partitioned.] Mr. Ulrich also refers to this genus *Monticulipora discoidea*.
- ARTHROCLEMA spiniforme**, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Trenton Gr. [Sig. spiniform.]
- ARTHRONEMA**, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. [Ety. *arthron*, a joint; *nema*, a thread.]  
*curtum*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. short.]  
*tenuis*, James, as figured by Ulrich, 1882 (*Helopora tenuis*), Jour. Cin. Soc. Nat. Hist., vol. 5, Trenton and Utica Slate Gr. [Sig. thin.]
- ASCODICTYON**, Nicholson, 1877, Ann. and Mag. Nat. Hist., 4th ser., vol. 19. [Ety. *askos*, a leather bottle; *dictyon*, a net.]  
*fusiforme*, Nicholson, 1877, Ann. and Mag. Nat. Hist., 4th ser., vol. 19, Ham. Gr. [Sig. fusiform.]  
*stellatum*, Nicholson, 1877, Ann. and Mag. Nat. Hist., 4th ser., vol. 19, Ham. Gr. [Sig. starred.]
- ATACTOPORA**, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2. [Ety. *atactos*, without regularity; *porus*, a pore.]  
*hirsuta*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. rough.]  
*maculata*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. spotted.]  
*multigranosa*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. many grained.]  
*mundula*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. neat.]
- ATACTOPORA septosa**, see *Amplexopora septosa*.  
*subramosa*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. somewhat branchy.]  
*tenella*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. neat.]
- BATOSTOMA**, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, founded upon *Monticulipora jamesi*, and *M. implicata*.
- BATOSTOMELLA**, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, founded upon *Monticulipora gracilis*, *M. granulifera*, and *Trematopora annulifera*.
- BERENICEA**, Lamoureaux, 1821, Exp. Meth. des. genres d. pol., p. 80. [Ety. mythological name.]  
*primitiva*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. primitive.]  
*vesiculosa*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Utica Slate or Lower part Hud. Riv. Gr. [Sig. vesiculous.]
- BYTHOPORA**, Miller & Dyer, 1878, Cont. to Pal., No. 2. [Ety. *buthos*, depths of the sea; *poros*, a pore.]  
*arctipora* instead of *Ptilodictya arctipora*.  
*fruticosa*, Miller & Dyer, 1878, Cont. to Pal., No. 2, Hud. Riv. Gr. [Sig. shrubby.]  
*nashvillensis*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Trenton Gr. [Ety. proper name.]
- CALLOPORA aculeolata**, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. thorny.]  
*cervicornis*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. stag horned.]  
*cincinnatiensis*, Ulrich, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Ety. proper name.]  
*diversa*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. diverse.]  
*exsul* instead of *Alveolites exsul*.  
*irregularis*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. irregular.]  
*minutissima*, Nicholson, 1875, Pal. Prov. Ont., Ham. Gr. [Sig. very minute.]  
*multiseriata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having many series.]  
*subplana*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. somewhat level.] Mr. Ulrich refers to this genus *Monticulipora ramosa*, *M. dalei*, *M. sigillarioides*, *M. nodulosa*, and *M. andrewsi*.

- CERAMOPORA explanata*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. spread out.]  
*nothus*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. spurious.]  
*rariopora*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. having few pores.]
- CLATHROPORA intermedia*, Nicholson & Hinde, 1874, Can. Jour., Niagara Gr. [Sig. intermediate.]
- CLONOPORA*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Ety. *klonos*, confusion; *poros*, pore.]  
*incurva*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. incurved.]  
*semireducta*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. half drawn back.]
- Crateripora*, Ulrich, 1879. *C. erecta*, *C. lineata*, and *C. lineata* var. *expansa*, represent basal fragments of Bryozoa, and are not entitled to rank as species.
- CRISINA scrobiculata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having small furrows.]
- CYSTODICTYA*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. [Ety. *kustis*, a bladder; *dictyon*, a net.]  
*ocellata*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Keokuk Gr. [Sig. having little eyes.]
- CYSTOPORA*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Ety. *kustis*, a bladder; *poros*, a pore.]  
*geniculata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. geniculated.]
- DICRANOPORA*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. [Ety. *dikranos*, two pointed; *poros*, a pore.]  
*lata*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. wide.]  
*trentonensis*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Trenton Gr. [Ety. proper name.]
- ERIDOPORA*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. [Ety. *eridos*, in dispute; *poros*, a pore.]  
*macrostoma*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Kaskaskia Gr. [Sig. long mouth.]  
*punctifera*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Kaskaskia Gr. [Sig. bearing punctures.]
- ESCHAROPORA angusta*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. narrow.]
- DIPLOTRYPA milleri*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Niagara Gr. [Ety. proper name.]
- DISCOTRYPA*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, founded upon *Chetetes elegans*.
- FENESTELLA acaulis*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. without a stem.]  
*aculeata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. thorny.]
- FENESTELLA adnata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. close to.]  
*aqualis*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. equal.]  
*ambigua*, Hall, 1879, 28th Reg. Rep., Niagara Gr. [Sig. doubtful.]  
*angulata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. angular.]  
*anonyma*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. nameless.]  
*arctica*, Salter, 1855, Belcher's last Arctic Voyage, vol. 2, Carboniferous. [Sig. arctic.]  
*bellistriata*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. beautifully striated.]  
*bi-imbricata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. double imbricated.]  
*biseriata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having a double series.]  
*biserrulata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. double serrulated.]  
*brevisulcata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having a short furrow.]  
*celsipora*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having high pores.]  
*celsipora* var. *minima*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. the least.]  
*celsipora* var. *minor*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. less.]  
*conferta*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. pressed together.]  
*conjunctiva*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. connecting.]  
*corticata*, F. *intermedia*, F. *subretiformis*, F. *trituberculata* and F. *variabilis*, are from the Coal Meas.  
*cribrosa*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. sieve like.]  
*cultellata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. being like a little knife.]  
*cultrata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. knife-formed.]  
*curvijunctura*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. curve junction.]  
*cylindracea*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. like a cylinder.]  
*davidsoni* instead of *F. dawsoni*.  
*depressa*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. depressed.]  
*distans*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. distant.]  
*elegantissima*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. most elegant.]  
*erectipora*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having erect pores.]  
*fastigata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. pointed.]

- FENESTELLA favosa*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. honeycomb like.]
- flabelliformis*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. fan like.]
- granifera*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. grain bearing.]
- granilinea*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. grain lined.]
- granulosa*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Hud. Riv. Gr. [Sig. full of grains.]
- hexagonalis*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. hexagonal.]
- hexagonalis* var. *foraminulosa*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. full of openings.]
- interrupta*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. interrupted.]
- largissima*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. largest.]
- lata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. wide.]
- latijunctura*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. wide jointed.]
- levinodata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having smooth knots.]
- lineanoda*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having lined knots.]
- lunulata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. resembling a small crescent.]
- mutabilis*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. changeable.]
- nervia*, [Sig. having strong ribs, instead of proper name.]
- nexa*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. interlaced.]
- oxfordensis*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Ety. proper name.]
- parallelata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. parallel.]
- perangulata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. very angular.]
- permarginata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having a large border.]
- pernodosa*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. very nodose.]
- perplexa*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. intricate.]
- pertenuis*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. very thin.]
- pertenuis*, Hall, 1881, The name was preoccupied. See *F. proutana*.
- perundata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. very wavy.]
- porosa*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. full of pores.]
- prolixa*, Hall, 1879, Desc. New Spec. Foss., Niag. Gr. [Sig. Stretched out.]
- propria*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. proper.]
- proutana*, n. sp., Up. Held. Gr. Named in respect for the work of Dr. Hiram A. Prout. Proposed instead of *F. pertenuis*, Hall, 1881, Bryozoans of the Up. Held. Gr., page 29, which was preoccupied.
- FENESTELLA quadrangularis*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. quadrangular.]
- rhombifera*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. rhomb bearing.]
- rigida*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. rigid.]
- robusta*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. robust.]
- semirotonda*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. half rotund.]
- serrata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. serrated.]
- singularitas*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. single.]
- stellata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. starred.]
- stipata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. pressed together.]
- striatopora*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having striae and pores.]
- submutans*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. somewhat changing.]
- substriata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. somewhat striated.]
- tantulus*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. so little.]
- tegulata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. tiled.]
- torta*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. twisted.]
- variopora*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having different pores.]
- GLAUCONOME nodata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. knotty.]
- sinuosa*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. sinuous.]
- tenuistriata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. fine lined.]
- GORGONIA anticorum*, Castelnau, 1843, Syst. Sil. Not recognized.
- retiformis*, Hall, 1843, Geo. 4th Dist. N. Y., Niagara Group. Supposed to be a Graptolite.
- siluriana*, Castelnau, 1843, Syst. Sil. Not recognized.
- GRAPTODICTYA*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. [Ety. *grapho*, to write; *dictyon*, a net.] I am unable to distinguish the generic difference between this and *Stictopora*.
- nitida*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. neat.]
- HEMITRYPA dubia*, Hall, 1876, is a *Fenestella*, and the name *dubia* being preoccupied, the species is called *F. ambigua*.



- HOMOTRYPA**, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. [Ety. *homos*, similar; *trypa*, a perforation.]
- curvata*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. curved.]
- obliqua*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. oblique.]
- INTRAPORA**, Hall, 1881, Bryozoans of the Up. Held. Gr. [Ety. *intra*, within; *porus*, a pore.]
- puteolata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. pitted.]
- INTRICARIA clathrata**, Miller & Dyer, 1878, Cont. to Pal., No. 2, Hud. Riv. Gr. [Sig. latticed.]
- LEIOCLEMA**, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5 [Ety. *leios*, smooth; *klema*, a twig.] Proposed to include *Callopora punctata*, Hall.
- LICHENALIA alternata**, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. alternated.]
- alveata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. hollowed out.]
- bistriata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. double striated.]
- carinata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. carinated.]
- circincta*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. encompassed.]
- clivulata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having little Hills.]
- complexata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. encircled.]
- concentrica var. maculata*, Hall, 1879, 28th Rep. N. Y. St. Mus., Niagara Gr. [Sig. spotted.]
- conulata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having little cones.]
- crustacea*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having a crust.]
- denticulata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. denticulated.]
- granifera*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. grain bearing.]
- longispina*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. long thorned.]
- lunata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. crescent shaped.]
- paliformis*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. stake formed.]
- permarginata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having a large margin.]
- pyriformis*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. pear shaped.]
- radiata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. radiated.]
- subcava*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. somewhat excavated.]
- substellata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. somewhat starred.]
- MITOCLEMA**, Ulrich 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. [Ety. *mitos*, a thread; *klema*, a twig.]
- cinctosa*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Trenton Gr. [Sig. girded.]
- MONOTRYPELLA**, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. [Ety. diminutive of *Monotrypa*.]
- æqualis*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. equal.]
- subquadrata*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. subquadrate.] Mr. Ulrich also refers to this genus *Monticulipora quadrata*.
- MONTICULIPORA consimilis**, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. entirely similar.] Mr. Ulrich refers this genus to the Bryozoa.
- lævis*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. smooth.]
- parasitica*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. parasitic.]
- wetherbyi*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Ety. proper name.]
- PACHYDICTYA**, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. [Ety. *pachys*, thick, *dictyon*, a net.]
- robusta*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Trenton Gr. [Sig. robust.]
- PALESCHARA incrassata**, Hall, 1879, 28th Rep. Niagara Gr. [Sig. thickened.]
- PERONOPORA uniformis**, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. one formed.] To this genus Mr. Ulrich refers *Monticulipora compressa*.
- PETIGOPORA**, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. Founded upon *Monticulipora petehialis*.
- PHYLLODICTYA**, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. [Ety. *phylon*, a leaf; *dictyon*, a net.]
- frondosa*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Trenton Gr. [Sig. frondose.]
- PHRACTOPORA**, Hall, 1881, Bryozoans of the Up. Held. Gr. [Ety. *phraktos*, enclosed; *poros*, a pore.]
- cristata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. crested.]
- PHYLLOPOR**, King, 1849, Ann. & Mag. Nat. Hist., 2d ser. vol. 3 p. 389 [Ety. *phylon*, a leaf; *poros*, a perforation.]
- variolata*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. variolated.]
- POLYPORE arkonensis**, n. sp., Ham. Gr. [Ety. proper name.] Proposed instead of *P. tuberculata*, Nicholson, in Geo. Mag. for Apr., 1874, and Rep.

- Pal. Prov. Ont., p. 100, figs. 37, *a*, *b*, *c*. Found at Arkona, township of Bosanquet, Canada.
- POLYPORA** *grandis*, Toulou, 1875, N. Jahrbuch, Carboniferous. [Sig. large.]
- megastoma*, DeKoninck, 1863, Quar. Jour. Geo. Soc., vol. 19, Carboniferous. [Sig. large mouth.]
- tuberculata*, Prout, is from the Kaskaskia Gr
- tuberculata*, Nicholson, see *P. arkonensis*.
- PRASOPORA** *nodosa*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. nodose.]
- PRISMAPORA**, Hall, 1881, Bryozoans of the Up. Held. Gr. [Ety. *prismos*, the hole made by a cylindrical saw; *poros*, a pore.]
- paucirama*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having few branches.]
- triquetra*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. three cornered.]
- PTILODICTYA** *acuminata*, is *Stictopora acuminata*.
- arctipora* is *Bythopora arctipora*, from the Hud. Riv. Gr.
- briareus*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Trenton Gr. [Ety. mythological name.]
- hilli*, James, 1882 (as figured by Ulrich), Jour. Cin. Soc. Nat. Hist., vol. 5, Trenton Gr. [Ety. proper name.]
- internodia*, is *Stictopora internodia*.
- maculata*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. maculated.]
- magnifica*, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. magnificent.]
- nodosa*, James, 1882 (as figured by Ulrich), Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. nodose.]
- perelegans*, see *Stictopora perelegans*.
- plumaria*, James, 1882 (as figured by Ulrich), Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. belonging to a feather.]
- punctata*, Nicholson & Hinde, 1878, Can. Jour., Clinton Gr. [Sig. having punctures.]
- ramosa*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Trenton Gr. [Sig. ramose.]
- triangulata*, White, 1878, Proc. Acad. Nat. Sci., Coal Meas. [Sig. triangulated.]
- RAMIPORA**, Toulou, 1875, N. Jahrbuch. [Ety. *ramus*, branch; *porus*, pore.]
- hochstetteri*, Toulou, 1875, N. Jahrbuch, Carboniferous. [Ety. proper name.]
- RETEPORA** *fenestrata* is from the Trenton Gr.
- RHINDICTYA**, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. [Ety. *rhine*, a file; *dichyon*, a net.]
- nicholsoni*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Trenton Gr. [Ety. proper name.]
- Ropalonaria*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2. [Ety. *ropalon*, a club.]
- venosa*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. veiny.]
- SAGENELLA** *ambigua*, Walcott, 1879, Utica Slate and related formations, Utica Slate. [Sig. ambiguous.]
- SCALARIPORA**, Hall, 1881, Bryozoans of the Up. Held. Gr. [Ety. *scalare*, a staircase, ladder; *porus*, a pore.]
- scalariformis*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. ladder formed.]
- subconceava*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. somewhat concave.]
- SCENELLOPORA**, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. [Ety. *scene*, a tent; *ellus*, diminutive; *poros*, a pore.]
- radiata*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Trenton Gr. [Sig. radiated.]
- SPATIOPORA**, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. Founded upon *Monticulipora tuberculata*.
- STICTOPORA** *basalis*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Trenton Gr. [Sig. basal.]
- fruticosa*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. bushy.]
- internodia*, Miller and Dyer, 1878 (*Ptilodictya internodia*). Cont. to Pal., No. 2, Hud. Riv. Gr. [Sig. between nodes.]
- invertis*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. inverted.]
- linearis*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. linear.]
- orbipora*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. having round pores.]
- ovatipora*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having ovate pores.]
- perareta*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. very close.]
- perelegans*, Ulrich, 1878 (*Ptilodictya perelegans*). Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. very elegant.]
- rhomboidea*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. rhomb like.]
- rigida*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. rigid.]
- semistriata*, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. half striated.]
- Stictoporella*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. [Ety. diminutive of *Stictopora*.] I am unable to distinguish this from *Stictopora*.
- interstincta*, Ulrich, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Utica Slate Gr. [Sig. divided.]

STOMATOPORA, Bronn, 1825, System d. urwetl. Pflanzenthier. [Ety. *stoma*, mouth; *poros*, a perforation.] This name is preferred to Alecto, because the latter name had been used prior to its application among the Bryozoa.

alternata instead of Stromatopora alternata.

proutana, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Ety. proper name.]

SYNOCLADIA rectistyla, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Kaskaskia Gr. [Sig. having straight stiles.]

THALLISTIGMA, Hall, 1881, Bryozoans of the Up. Held. Gr. (Ety. *thallos*, a young branch or twig; *stigma*, a spot.)

intercellatum, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. being intercellular.]

lamellatum, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. lamellated.]

sparsipora, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having few pores.]

THAMNISCUS multiramus, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. many branched.]

nanus, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. a dwarf.]

THAMNOPORA, Hall, 1881, Bryozoans of the Up. Held. Gr. [Ety. *thamnos*, a bush; *poros*, a pore.]

divaricata, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. divaricated.]

TREMATOPORA alternata, Hall, 1881, Bryozoans of the Up. Held. Gr. Sig. alternated.]

americana, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Burlington Gr. [Ety. proper name.]

annulifer, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Hud. Riv. Gr. [Sig. ring bearing.]

annulata, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. annulated.]

annulata var. pronaspina, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. having the prickles bent forward.]

arborea, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. tree like.]

crebipora, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. having close pores.]

*fragilis*, refer to Kinderhook Gr.

granulata, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Hud. Riv. Gr. [Sig. granulated.]

macropora, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. having long pores.]

rectilinea, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. straight lined.]

scutulata, Hall, 1881, Bryozoans of the Up. Held. Gr. [Sig. checkered.]

subimbricata, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. somewhat imbricated.]

vesiculosa is from the Burlington Gr.

## CLASS BRACHIOPODA.

The Family SPIRIFERIDÆ in the 1st edition of this work should be subdivided as follows:

Family ATHYRIDÆ—Athyris, Merista, Meristella, Meristina. Family ATRYPIDÆ—Atrypa, Cœlospira, Zygospira. Family NUCLEOSPIRIDÆ—Nucleospira, Retzia, Trematospira. Family SPIRIFERIDÆ—Spirifera, Spiriferina, etc.

*Aegilops*, Hall. This name was preoccupied for a genus in Botany, beside the species is supposed to be founded upon the cast of a Lamellibranch.

ANASTROPHIA internascens, Hall, 1879, 28th Reg. Rep., Niagara Gr. [Sig. growing between.]

ATHYRIS americana, A. euzona and A. formosa, are from the Kaskaskia Gr.

ehloe is from the Ham. Gr.

claytoni, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Waverly Gr. [Ety. proper name.]

clusia, Billings, 1860, Can. Jour., vol. 5, Corniferous limestone. [Sig. pertaining to *Clusium*, the name of a town in Etruria.]

corpulenta, A. hannibalensis, and A. prouti, are from the Kinderhook Gr.

obmaxima, Mc Chesney, 1860, Desc. New

Pal. Foss., p. 80, Low. Carb. [Sig. large in front.]

ATHYRIS ohioensis is from the Waverly Gr.

papilioniformis, McChesney, 1867, Trans. Chi. Acad. Sci., vol. 1, Kaskaskia Gr. [Sig. butterfly formed.]

pectinifera is from the Keokuk Gr.

persinuata, Meek, 1877, U. S. Geo. Sur., 40th parallel, Carboniferous. [Sig. very sinuate.]

reflexa is from the Warsaw Gr.

trinuclea instead of Terebratula trinuclea.

ATRYPA *inflata* was not defined.

mansonii, Salter, 1852 (Rhynchonella mansonii), Sutherland's Jour., vol. 2, Devonian. [Ety. proper name.]

mustella, Castelnau, 1843, Syst. Sil. Not recognized.

phoca, Salter, 1852 (Rhynchonella phoca), Sutherland's Jour., vol. 2, Devonian. [Sig. a sea dog.]

- Calceola*. This genus belongs to the Polypi and the family Cyathophyllinæ.
- CAMARELLA ortonii* is from the Niagara Gr. primordialis, Whitfield, 1878 (Triplesia primordialis), Ann. Rep. Geo. Sur. Wis., Potsdam Gr. [Sig. primordial.] waldronensis, Miller & Dyer, 1878 (Spirifera (?) waldronensis), Jour. Cin. Soc. Nat. Hist., vol. 1, Niagara Gr. [Ety. proper name.]
- CAMAROPHORIA giffordii*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Middle Coal Meas. [Ety. proper name.]
- occidentalis*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Burlington Gr. [Sig. western.]
- CENTRONELLA allei* is from the Kinderhook Gr.
- crassicardinalis*, Whitfield, 1882, Bull. Ann. Mus. Nat. Hist., No. 3, Warsaw Gr. [Sig. from the thick cardinal edges.]
- flora*, Winchell, 1879, Notices and Desc. Foss., from the Marshall Gr. [Ety. mythological name.]
- CHONETES loganensis*, Hall & Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Waverly Gr. [Ety. proper name.]
- michiganensis*, C. multicoستا, C. ornatus, belong to the Marshall or Choteau Group.
- minima*, Hall, 1876, being preoccupied, is now C. undulatus.
- reversus*, Whitfield, 1882, Desc. New Spec. Foss., from Ohio, Marcellus shale [Sig. reversed.]
- striatellus*, Dalman, 1827 (Orthis striatella), Kongl. Svenska Ak. Handl., Up. Sil. [Sig. finely channeled.]
- undulatus*, Hall, 1879, 28th Reg. Rep., Niagara Gr. [Sig. undulated.]
- verneuilianus* var. *utahensis*, Meek, 1876, Simpson's Rep. on Gt. Basin of Utah, Carboniferous. [Ety. proper name.]
- CRANIA carbonaria*, Whitfield, 1882, Desc. New Spec. Foss., from Ohio, Coal Meas. [Sig. from the Carboniferous.]
- granulosa*, Winchell, 1880, 8th Reg. Geo. Sur. Minn., Trenton Gr. [Sig. full of granules.]
- parallatella*, Ulrich, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. A doubtful species.
- percarinata*, Ulrich, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. A doubtful species.
- socialis*, Ulrich, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. social.] Found upon crinoid columns.
- spinigera*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. spine bearing.]
- CRYPTONELLA lens* instead of *Terebratula lens*.
- lincklæni* instead of *Terebratula lincklæni*.
- CYRTINA acutirostris* is from the Choteau Gr.
- euphemia*, Billings, 1863, Can. Nat. and Geol., vol. 8, Corniferous Gr. [Sig. of good omen.]
- DISCINA manhattensis*, Meek & Hayden, 1859, Proc. Acad. Nat. Sci., Coal Meas. [Ety. proper name.]
- marginalis*, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Ham. Gr. [Sig. margined.]
- meekana*, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Coal Meas. [Ety. proper name.]
- microscopica*, Shumard, 1861, Am. Jour. Sci. and Arts., vol. 32, Potsdam Gr. [Sig. microscopic.]
- newberryi* and *D. patellaris* are from the Waverly or Marshall Gr.
- saffordi*, Winchell, is from the Marshall Gr.
- sublamellosa*, Ulrich, 1878, Jour. Cin. Soc. Nat. Hist. Probably the cast of a Trematis.
- tenuilineata*, Meek & Hayden, 1859, Proc. Acad. Nat. Sci., Coal Meas. [Sig. fine lined.]
- tenuistriata*, Ulrich, 1878, Jour. Cin. Soc. Nat. Hist. Probably the cast of a Trematis.
- GYPIDULA munda*, Calvin, 1878, Bull. U. S. Geo. Sur., vol. 4, No. 3, Low. Devonian. [Sig. elegant.]
- Hemipronites americanus*, refer to *Streptorhynchus americanum*.
- KONINKIA americana* is from the Kaskaskia Gr.
- KUTORGINA minutissima*, Hall & Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Potsdam Gr. [Sig. very small.]
- LEIORHYNCHUS laura*, Billings, May, 1860 (Rhynchonella laura), Can. Jour., Ham. Gr. [Ety. proper name.]
- multicosta* was regarded by Billings as a syn. for *L. laura*.
- LEPTENA melita*, Hall & Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Potsdam Gr. [Ety. mythological name.]
- plicatella*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Utica Slate Gr. [Sig. having small folds.]
- vicina*, Castelnau, 1843, Syst. Sil. Not recognized.]
- LINGULA acutangula*, Roemer, 1852, Kreid. von Texas, Silurian. [Sig. acute angled.]
- billingsana*, Whiteaves, 1878, Am. Jour. Sci. & Arts., 3d ser., vol. 16, St. John's Gr. [Ety. proper name.]
- densa* was described in 1863, in 16th Reg. Rep.
- elderi*, Whitfield, 1880, Am. Jour. Sci. & Arts., 3d ser., vol. 19 Trenton Gr. [Ety. proper name.]
- gibbosa*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. gibbous.]
- hurlbuti*, Winchell, 1880, Geo. Sur.

- Minn., 8th Rep., Galena Gr. [Ety. proper name.]
- LINGULA iowensis, Owen, 1840, Rep. Min. Lands, Iowa, Wis., and Ill., Galena Gr. [Ety. proper name.]
- melie was described in 1863, in 16th Reg. Rep.
- membranacea, is from the Marshall Gr. rectilatera. Restore it.
- striata, Emmons, 1856, Am. Geol., Quebec Gr. [Sig. striated.]
- LINGULEPS cuneolus, Whitfield, 1877, Prelim. Rep. Pal., Black Hills, Potsdam Gr. [Sig. a little wedge.]
- ella, Hall & Whitfield, 1877, U. S. Expl. 40th parallel, Quebec Gr. [Sig. small.]
- mæra, Hall & Whitfield, 1877, U. S. Expl. 40th parallel, Potsdam Gr. [Ety. mythological name.]
- minuta, Hall & Whitfield, 1877, U. S. Expl. 40th parallel, Potsdam Gr. [Sig. minute.]
- perattenuata, Whitfield, 1877, Prelim. Rep. Pal., Black Hills, Potsdam Gr. [Sig. very attenuated.]
- MERISTELLA rectirostra, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. straight beak.]
- NUCLEOSPIRA rotundata, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Low. Held. Gr. [Sig. rounded.]
- OBOLELLA desquamata, is founded according to Ford on the dorsal valve of *O. crassa*, and should be referred to the Lower Potsdam Gr.
- discoidea, Hall & Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Potsdam Gr. [Sig. discoid.]
- ORBICULOIDEA conica, Dwight, 1880, Am. Jour. Sci. and Arts, 3d Ser., vol. 19, Trenton Gr. [Sig. conical.]
- ORTHIS alternans, Castelnau, 1843. Not recognized.
- amena, Winchell, 1880, Geo. Sur. Minn. 8th Rep., Hud. Riv. Gr. [Sig. pleasant.]
- charlottæ, Winchell, 1880, Geo. Sur. Minn. 8th Rep., Hud. Riv. Gr. [Ety. proper name.]
- cincinnatensis, n. sp. Hud. Riv. Gr., Cincinnati, Ohio. Proposed instead of *Orthis costata*, Hall, 1845, Am. Jour. Sci. and Arts. This is a very small species, found associated with other minute fossils on Vine street hill.
- circularis, Winchell, 1880, Geo. Sur. Min. 8th Rep., Hud. Riv. Gr. [Sig. circular.]
- elytie is from the Trenton Gr.
- conradi, Castelnau, 1843. Not recognized.
- conradi, Winchell, 1880, Geo. Sur. Minn. 8th Rep., Hud. Riv. Gr. [Ety. proper name.]
- cooperensis is from the Warsaw Gr.
- costata, Hall, being preoccupied, see *Orthis, cincinnatensis*.
- ORTHIS dalyana, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Burlington Gr. [Ety. proper name.]
- ella, *O. emacerata*, and *O. jamesi*, are from the Hud. Riv. Gr.
- eryna was described in 1863 in the 16th Reg. Rep.
- flabellum, Sowerby, 1839, in Murch. Sil. Syst., Niagara Gr. [Sig. a small fan.]
- flava, and *O. ocellatus* are from the Kinderhook Gr.
- huroniensis, Castelnau, 1843, Syst. Sil. Not recognized.
- infera, Calvin, 1878, Bull. U. S. Geo. Sur. Terr., vol. 4, No. 3, Low. Devonian. [Sig. underground.]
- kassubæ, Winchell, 1880, Geo. Sur. Minn. 8th Rep., Hud. Riv. Gr. [Ety. proper name.]
- media, Winchell, 1880, Geo. Sur. Minn. 8th Rep., Hud. Riv. Gr. [Sig. in the middle.]
- minneapolis, Winchell, 1880, Geo. Sur. Minn., 8th Rep., Hud. Riv. Gr. [Ety. proper name.]
- pogonipensis, Hall & Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Chazy Gr. [Ety. proper name.]
- schohariensis, Castelnau, 1843, Syst. Sil. Not recognized.
- scovillei, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Ety. proper name.]
- sectostriata, Ulrich, syn. for *O. ella*.
- striatella, see *Chonetes striatellus*.
- subelliptica, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. subelliptical.]
- subnodosa, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. subnodose.]
- PENTAMERUS beaumonti, Castelnau, 1843, Syst. Sil. Not recognized.
- coppingeri, Etheridge, 1878, Quar. Jour. Geo. Soc., vol. 34, Up. Silurian. [Ety. proper name.]
- deshayesi, Castelnau, 1843, Syst. Sil. Not recognized.
- lenticularis, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. lenticular.]
- pesovis, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Low. Held. Gr. [Sig. sheep foot.]
- trisinuatus, McChesney, 1861, Desc. New Pal. Foss., p. 86, Niagara Gr. [Sig. three furrowed.]
- PORAMBONITES obscurus, Hall & Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Quebec Gr. [Sig. obscure.]
- PRODUCTUS callawayensis, is from the Ham. Gr.
- cooperensis, *P. curtirostratus*, *P. dolorosus*, and *P. parvulus*, are from the Choteau or Kinderhook Gr.
- coriformis, is from the Kaskaskia Gr.
- depressus, and *P. fentonensis*, are from the Keokuk Gr.

- PRODUCTUS** *hepar*, Morton, 1836, Am. Jour. Sci. & Arts., vol. 29, Coal Meas. Not recognized.
- nanus*, Meek & Worthen, 1860, Proc. Acad. Nat. Sci., Coal Meas. [Sig. a dwarf.]
- nevadensis*, Meek, 1877, U. S., Geo. Sur., 40th parallel, Carboniferous. [Ety. proper name.]
- pocillum*, Morton, 1836, Am. Jour. Sci. & Arts., vol. 29, Coal Meas. Not recognized.
- pyxidiformis*, DeKoninck, 1847, Monographie du genre Productus, Sub-carboniferous. [Sig. box like.]
- subhorridus*, Meek, 1877, U. S. Geo. Sur., 40th parallel, Carboniferous. [Sig. somewhat like *P. horridus*.]
- sulcatus*, Castelnau, 1843, Syst. Sil. Not recognized.
- RENSELERIA** *condoni* instead of *R. conradi*.
- RETZIA** *evax* instead of *Rhynchospira evax*. *marcyi*, is from the Kaskaskia Gr. *osagensis*, and *R. popana*, are from the Choteau Gr.
- semplicata*, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. having six folds.]
- woosteri*, White, 1879, Bull. U. S. Sur., vol. 5, No. 2, Coal Meas. [Ety. proper name.]
- RHYNCHONELLA** *ambigua*, Calvin, 1878, Bull. U. S. Geo. Sur., vol. 4, No. 3, Low. Devonian. [Sig. ambiguous.]
- arctiostriata* and *R. perrostellata* are from the Kaskaskia Gr.
- boonensis* and *R. ringens* are from the Burlington Gr.
- cooperensis*, *R. heteropsis*, *R. micropleura*, *R. missouriensis*, *R. obsolescens*, *R. persinuata* and *R. unica* are from the Choteau or Kinderhook Gr.
- cuneata*, refer to *Rhynchotretra cuneata* var. *americana*.
- eatoniiformis* is a Syn for *R. rocky-montana*.
- emmonsii*, Hall & Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Devonian. [Ety. proper name.]
- hydraulica*, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Low. Held. Gr. [Sig. hydraulic, from the hydraulic limestone.]
- internodia*, Barris, 1879, Proc. Davenport Acad. Sci., Corniferous Gr. [Sig. between nodes.]
- laura*, see *Leiorhynchus laura*.
- mansoni*, see *Atrypa mansoni*.
- medea*, Billings, 1860, Can. Jour., vol. 5, Corniferous limestone. [Ety. mythological name.]
- neenah*, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Trenton Gr. Ety. proper name.]
- neglecta* var. *scobina* is from the Niagara Gr.
- RHYNCHONELLA** *nucula*, Sowerby, 1839 (*Terebratula nucula*), Murch. Sil. Syst., Up. Sil. [Sig. a small nut.]
- opposita*, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. opposite.]
- perlamellosa*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Hud. Riv. Gr. [Sig. very lamellose.]
- phoca*, see *Atrypa phoca*.
- raricosta*, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Up. Held. Gr. [Sig. having few costæ.]
- rockymontana*, Marcou, 1858 (*Terebratula rockymontana*), Geo. North America, Coal Meas. [Ety. proper name.]
- sinuata* may be erased.
- stricklandi*, Sowerby, 1839 (*Terebratula sticklandi*), Murch. Sil. Syst., Niagara Gr. [Ety. proper name.]
- tuta*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Burlington Gr. [Sig. examined.]
- warrenensis* is from the Ham. Gr.
- whitii*, Hall, 1863, being preoccupied, see *Rhynchonella whitiana*.
- whitiana*, n. sp., Niagara Gr., from Waldron, Indiana. Proposed instead of *R. whitii*, Hall, 1863, Trans. Alb. Inst., vol. 4, p. 216, and also in 28th Rep. N. Y. St. Mus. Nat. Hist., p. 164, pl. 26, figs. 23-33, and again in the 11th Ann. Rep. Geol. & Nat. Hist. of Indiana, p. 307, pl. 26, figs. 23-33.
- Rhynchospira* is a syn. for *Retzia*.
- evax*, refer to *Retzia evax*.
- sinuata* was described by Hall, in 1860, Can. Nat. & Geo., vol. 5.
- RHYNCHOTRETRA**, Hall, 1879, 28th Reg. Rep. [Ety. *rhynchos*, beak; *tretos*, with a hole in it.]
- cuneata* var. *americana*, Hall, 1879, 28th Reg. Rep., Niagara Gr. [Ety. proper name.]
- quadruplicata*, S. A. Miller, instead of *Trematospira quadruplicata*.
- SPIRIFERA** *alata*, Castelnau, 1843, Syst. Sil. Not recognized.
- albapinensis*, Hall & Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Waverly Gr. [Ety. proper name.]
- aldrichi*, Etheridge, 1878, Quar. Jour. Geo. Soc., vol. 34, Devonian. [Ety. proper name.]
- amara*, *S. cooperensis*, *S. hannibalensis*, *S. marionensis*, *S. missouriensis*, *S. semiplicata*, and *S. vernonensis*, are from the Choteau or Kinderhook Gr.
- arctica*, Houghton, 1857, Jour. Roy. Soc. Dub., vol. 1, Devonian. [Sig. arctic.]
- argentaria*, Meek, 1877, U. S. Geo. Sur., 40th parallel, Devonian. [Sig. pertaining to silver.]
- atwaterana*, S. A. Miller, 1878, Proc. Davenport Acad. Sci., Ham. Gr. [Ety. proper name.] Proposed instead of *S. pennata*, which was preoccupied.

- SPIRIFERA bicostata* var. *petila*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. thin.]
- clara* and *S. translata* are from the Kaskaskia Gr.
- conradana*, n. sp., Oriskany, Up. Held. and Ham. Gr. Proposed instead of *S. fimbriata* of Conrad in Jour. Acad. Nat. Sci., vol. 8, p. 263, which was preoccupied.
- costalis*, Castelnau, 1843, Syst. Sil. Not recognized.
- crispa* var. *simplex*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. simple.]
- fastigata*, Morton, 1836, Am. Jour. Sci. and Arts, vol. 29, Coal Meas. [Sig. sloping up to a point.]
- fastigata*, Meek & Worthen. The name was preoccupied by Morton. See *S. mortonana*.
- fimbriata*, Morton, 1836, Am. Jour. Sci. and Arts, vol. 29, Coal Meas. [Sig. fringed.]
- fimbriata*, Conrad. The name was preoccupied. See *S. conradana*.
- fischeri*, Castelnau, 1843, Syst. Sil. Not recognized.
- hirtus*, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. hairy, rough]
- huronensis*, Castelnau, 1843, Syst. Sil. Not recognized.
- inaequivalvis* Castelnau, 1843, Syst. Sil. Not recognized.
- ligus*, Owen, 1852, Rep. Geo. Sur. Wis., Iowa and Minn., Ham. Gr. [Ety. proper name.]
- macrolepura*, Castelnau, 1843. The name was preoccupied.
- meeki*, is from the Burlington Gr.
- mortonana*, n. sp., Keokuk Gr. Proposed instead of *S. fastigata*, of Meek and Worthen, 1870, in Proc. Acad. Nat. Sci., p. 36, and afterward in Geo. Sur. Ill., vol. 6, p. 521, pl. 30, fig. 3, from Crawfordsville, Indiana.
- mucronata*, Conrad, syn. for *S. pennata*.
- multicostata*, Castelnau, 1843, Syst. Sil. Not recognized.
- murchisoni*, Castelnau, 1843, Syst. Sil. Not recognized.
- novamexicana*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Burlington Gr. [Ety. proper name.]
- pennata*, Atwater, 1820 (*Terebratula pennata*) Am. Jour. Sci. & Arts, vol. 2, Ham. Gr. [Sig. winged.]
- pennata*, Owen. The name was preoccupied, see *S. atwaterana*.
- rostrata*, Morton, 1836, Am. Jour. Sci. & Arts, vol. 29, Coal Meas. [Sig. beaked.]
- semiplicata*, is a syn. for *S. cooperensis*.
- sheppardi*, Castelnau, 1843, Syst. Sil. Not recognized.
- sonnerbyi*, Castelnau, 1843, Syst. Sil. Not recognized.
- SPIRIFERA strigosa*, Meek, 1860, Proc. Acad. Nat. Sci., Devonian. Proposed instead of *S. macra*, Meek, which was preoccupied. [Sig. thin.]
- subvaricosa*, is from the Chemung Gr.
- taneyensis*, Swallow, 1860, Trans. St. Louis Acad. Sci., vol. 1, Kinderhook Gr. [Ety. proper name.]
- temeraria*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Burlington Gr. [Sig. casual.]
- troosti*, Castelnau, 1843, Syst. Sil. Not recognized.
- utahensis*, Meek, 1860, syn. for *S. norwoodi*.
- waldronensis*, Miller & Dyer, refer to *Camarella waldronensis*.
- waverlyensis*, Winchell, 1870, Notices and Desc. Foss., from Marshall Gr. [Ety. proper name.]
- SPIRIFERINA spinosa* is from the Kaskaskia Gr.
- STREPTORHYNCHUS americanum*, Whitfield, 1878 (*Hemipronites americanus*), Ann. Rep. Geo. Sur. Wis., Hud. Riv. Gr. [Ety. proper name.]
- cardinale*, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Hud. Riv. Gr. [Sig. cardinal.]
- flabellum*, Whitfield, 1882, Desc. New Spec. Foss., from Ohio, Up. Held. Gr. [Sig. a small fan.]
- hydraulicum*, Whitfield, 1882, Desc. New Spec. Foss., from Ohio, Low. Held. Gr. [Sig. hydraulic, from the hydraulic limestone.]
- inflatum*, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. inflated.]
- occidentalis*, Newberry, syn. for *Meekella striato-costata*.
- pyramidalis*, Newberry, syn. for *Meekella striato-costata*.
- STRICKLANDINIA multilirata*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Sig. many furrowed.]
- STROPHALOSIA numularis*, is from the Marshall Gr.
- STROPHODONTA altidorsata*, *S. boonensis*, *S. cymbiformis*, *S. inflexa*, *S. kemperi*, *S. navalis* and *S. subcymbiformis* are from the Ham. Gr.
- calvini*, n. sp. Upper Helderberg Gr. Proposed instead of *S. quadrata*, Calvin, 1878, in Bull. U. S. Geo. Sur. Terr., vol. 4, No. 3, which was preoccupied.
- feildeni*, Etheridge, 1878, Quar. Jour. Geo. Soc., vol. 34, Up. Sil. [Ety. proper name]
- quadrata*, Swallow, 1860, Trans. St. Louis Acad. Sci., vol. 1, Ham. Gr. [Sig. quadrate.]
- quadrata*, Calvin, 1878, Bull. U. S. Geo. Sur. Terr., vol. 4, No. 3. The name was preoccupied, see *S. calvini*.
- semifasciata*, refer to *Strophonella semifasciata*.



- STROPHODONTA striata** instead of *Strophomena striata*.  
*variabilis*, Calvin, 1878, Bull. U. S. Geo. Sur., vol. 4, No. 3, Up. Held. Gr. [Sig. variable.]
- STROPHOMENA donneti**, Salter, 1852, Sutherland's Jour., vol. 2, Devonian. [Ety. proper name.]
- kingi*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Hud. Riv. Gr. [Ety. proper name.]
- nemea*, Hall & Whitfield, 1877, U. S. Geo. Sur. 40th parallel, Quebec Gr. [Ety. proper name.]
- rhomboidalis*, should be credited to Wilckens, 1769 (Conchites rhomboidalis, Nachricht von Seltener Verst. Its range is from the Lower Silurian to the Keokuk Gr.  
*striata* refer to *Strophodonta striata wisconsinensis*, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Hud. Riv. Gr. [Ety. proper name.]
- STROPHONELLA**, Hall, 1879 28th Reg. Rep. [Ety. diminutive of *Strophos* twisted.] Hall refers to this genus *Strophodonta ampla*, *S. celata*, *S. cavum bona*, *S. leavenworthana*, *S. punctulifera*, *S. reversa* and *S. semifasciata*.
- SYRINGOTHYRIS halli**, is from the Kinderhook Gr., and *S. typus* is found in the Kinderhook and Keokuk Groups.
- TEREBRATULA acuminatissima**, Castelnau. Not recognized.  
*arcuata*, Swallow, see *T. shumardana*.  
*borealis*, Castelnau. Not recognized.  
*brevilobata*, is from the Kaskaskia Gr.  
*gracilis*, Swallow, see *T. swallowana*.  
*lapillus*, Morton, 1836, Am. Jour. Sci. & Arts, vol. 29, Coal Meas. [Sig. a little stone.]
- TEREBRATULA lens**, refer to *Cryptonella lens. lincklaeni*, refer to *Cryptonella lincklaeni. nuciformis*, Morton, 1836, Am. Jour. Sci. & Arts, vol. 29, Coal Meas. [Sig. nut formed.]
- nucula*, see *Rhynchonella nucula*.  
*pennata*, see *Spirifera pennata*.  
*rockymontana*, see *Rhynchonella rockymontana*.
- shumardana*, n. sp., Kaskaskia Gr. Proposed instead of *T. arcuata*, Swallow, 1863, Trans. St. Louis Acad. Sci., vol. 2, p. 83. which was preoccupied.  
*stricklandi*, see *Rhynchonella stricklandi*.  
*swallowana*, n. sp., Kaskaskia Gr. Proposed instead of *T. gracilis*, Swallow, 1863, Trans. St. Louis Acad. Sci., vol. 2, p. 83, which was preoccupied.
- trinuclea*, refer to *Athyris trinuclea*.  
*utah*, Hall & Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Waverly Gr. [Ety. proper name.]
- valenciennei*, Castelnau, 1843, Syst. Sil. Not recognized.
- TREMATIS quineuncialis**, Miller & Dyer, 1878, Cont. to Pal. No. 2, Hud. Riv. Gr. [Sig. from the quineunx punctures.]
- Trematospira quadriplicata*, S. A. Miller, refer to *Rhynchotretra quadriplicata*.
- Triplexia primordialis*, see *Camarella primordialis*.  
*putillus*, Hall, 1879, Desc. New Spec. Foss., syn. for *Camarella waldronensis*.
- ZYGOSPIRA concentrica**, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Niagara Gr. [Sig. concentric.]
- minima*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. the least.]

## CLASS PTEROPODA.

- CLATHROCÆLIA**, Hall, 1879, Pal. N. Y., vol. 5, pt. 2. [Ety. *clathro*, latticed; *koilia*, the belly.]
- eborica*, Hall, 1879, Pal. N. Y., vol. 5, pt. 2, Ham. Gr. [Ety. proper name.]
- COLEOLUS**, Hall, 1879, Pal. N. Y., vol. 5, pt. 2. [Ety. *koleos*, a sheath.]
- acicula* instead of *Orthoceras acicula*.  
*aciculatus* instead of *dentalium aciculatum*.
- crenatocinctus*, Hall, 1879, Pal. N. Y., vol. 5, pt. 2, Up. Held. Gr. [Sig. notched around.]
- gracilis*, Hall, 1879, Pal. N. Y., vol. 5, pt. 2, Chemung Gr. [Sig. slender.]
- mohri*, Hall, 1879, Pal. N. Y., vol. 5, pt. 2, Up. Held. Gr. [Ety. proper name.]
- spinulus*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. a little thorn.]
- tenuicinctus* instead of *Coleoprion tenuicinctum*.
- COLEOPRION**, *tenuis*, Hall, 1879, Pal. of N. Y., vol. 5, pt. 2, Ham. Gr. [Sig. thin.]
- CONULARIA continens** var. *rudis*, Hall, 1879, Pal. N. Y., vol. 5, pt. 2, Ham. Gr. [Sig. rude.]
- crustula*, White, 1880, 12th Rep. U. S. Geo. Sur. Terr., Coal Meas. [Sig. a little crust.]
- formosa*, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. beautiful.]
- indentata*, Conrad, 1854, Proc. Acad. Nat. Sci., vol. 7, Trenton Gr. [Sig. indented.]
- infrequens*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. infrequent.]
- multicostata*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci., Waverly Gr. [Sig. many ribbed.]
- osagensis*, is from the Kaskaskia Gr.
- subcarbonaria*, was first described in 1865, in Proc. Acad. Nat. Sci.

*CONULARIA verneuilana*, Emmons, 1846, Am. Quar. Jour. Agr. & Sci., vol. 4, Low. Carb. [Ety. proper name.]  
*whitei*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci., Waverly Gr. [Ety. proper name.]  
*HYOLITHES*, Eichwald, 1840, Sil. Schicht. Syst. in Ebstl.  
*aculeatus* instead of *Theca aculeata*, and it is from the Kinderhook Gr.  
*baconi*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Trenton Gr. [Ety. proper name.]  
*gregarius* instead of *Theca gregaria*.  
*parviusculus* instead of *Theca parviuscula*.  
*singulus*, Hall, 1879, Pal. N.Y., vol. 5, pt. 2, Ham. Gr. [Sig. single.]  
*triliratus*, Hall, 1879, Pal. N.Y., vol. 5, pt. 2, Ham. Gr. [Sig. three furrowed.]  
*STYLIOLA*, Lesueur, 1826. [Ety. from *stylos*, a pillar.]

*STYLIOLA fissurella*, Hall, 1843, instead of *Tentaculites fissurellus*.  
*fissurella* var. *intermittens*, Hall, 1879, Pal. N.Y., vol. 5, pt. 2, Genessee Slate. [Sig. intermitting.]  
*fissurella* var. *obsolescens*, Hall, 1879, Pal. N.Y., vol. 5, pt. 2, Ham. Gr. [Sig. obsolete.]  
*fissurella* var. *strigata*, Hall, 1879, Pal. N.Y., vol. 5, pt. 2, Marcellus shale. [Sig. fluted.]  
*obtusa*, Hall, 1879, Pal. N.Y., vol. 5, pt. 2, Ham. Gr. [Sig. obtuse.]  
*TENTACULITES gracilistriatus*, Hall, 1879, Pal. N.Y., vol. 5 pt. 2, Marcellus shale. [Sig. slender furrowed.]  
*neglectus*, Nicholson & Hinde, 1874, Can. Jour., Clinton Gr. [Sig. neglected.]  
*ornatus* is not an American species.  
*THECA*. The species under this genus may be referred to *Hyolithes*.

## CLASS GASTEROPODA.

*Aclis*, Loven, 1846, Index Mollusc. litora Scandin. occid. habit. Refer *A. minuta*, *A. robusta*, and *A. swallowana* to the genus *Aclisina*.  
*stevensoni*, see *Aclisina stevensoni*.  
*ACLISINA* DeKoninck, 1881, Faune du Calcaire Carbonifere de la Belgique Ann. d. Mus. Roy. d'Hist. Nat., tome 6. [Ety. from the genus *Aclis*.]  
*stevensoni*, White, 1882 (*Aclis stevensoni*), Rep. Invert. Foss. New Mex., Coal Meas. [Ety. proper name.]  
*ANTHRACOPUPA*, Whitfield, 1881, Am. Jour. Sci. & Arts, 3d ser., vol. 21. [Ety. *anthrax*, coal; *Pupa*, a genus.]  
*ohioensis*, Whitfield, 1881, Am. Jour. Sci. & Arts, 3d ser., vol. 21, Coal Meas. [Ety. proper name.]  
*BELLEROPHON alternodosus*, Whitfield, 1882, Desc. New Spec. Foss., from Ohio. Kaskaskia Gr. [Sig. having alternate nodes.]  
*antiquatus*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Potsdam Gr. [Sig. antiquated.]  
*bilabiatus*, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. two lipped.]  
*explanatus*, Hall, 1879, Pal. N.Y., vol. 5, pt. 2, Chemung Gr. [Sig. spread out.]  
*gibsoni*, White, 1882, 11th Rep. Geol. & Nat. Hist., Indiana, St. Louis Gr. [Ety. proper name.]  
*helena*, Hall, 1879, Pal. N.Y., vol. 5, pt. 2, Ham. Gr. [Ety. mythological name.]  
*hyalina*, Hall, 1879, Pal. N.Y., vol. 5, pt. 2, Up. Held. Gr. [Sig. of glass.]  
*inspeciosus*, White, 1882, Rep. Invert.

Foss., New Mex., Coal Meas. [Sig. not handsome.]  
*BELLEROPHON lineolatus* is from the Kinderhook Gr.  
*morrowensis*, Miller & Dyer, 1878, Cont. to Pal. No. 2, Hud. Riv. Gr. [Ety. proper name.]  
*nactus*, Hall, 1879, Pal. N.Y., vol. 5, pt. 2, Chemung Gr. [Sig. stumbled on.]  
*natator* instead of *Phragmostoma natator*.  
*pelops* var. *exponens*, Hall, 1879, Pal. N.Y., vol. 5, pt. 2, Up. Held. Gr. [Sig. exposed.]  
*perelegans*, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. very elegant.]  
*perforatus*, Winchell & Marey, 1866, syn. for *Bucania chicagensis*.  
*punctifrons*, refer to *Bucania punctifrons*.  
*repertus*, Hall, 1879, Pal. N.Y., vol. 5, pt. 2, Ham. Gr. [Sig. discovered.]  
*rotalina*, Hall, 1879, Pal. N.Y., vol. 5, pt. 2, Ham. Gr. [Sig. round lined.]  
*rugosus*, Emmons, 1856, Am. Geol., Utica Slate Gr. [Sig. rugose.]  
*subpapillosus*, White, 1879, Bull. U. S. Geo. Sur. Ter., vol. 5, Carboniferous. [Sig. somewhat papillated.]  
*vinculatus*, White and Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. bound.]  
*wisconsinensis*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Trenton Gr. [Ety. proper name.]  
*BUCANIA buellii*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Trenton Gr. [Ety. proper name.]  
*devonica* is from the Upper Held. Gr.

- BUCANIA punctifrons** should be referred to Emmons, 1842 (Bellerophon punctifrons), Geo. Rep. N. Y., Black River and Trenton Gr.
- BULIMORPHA**, Whitfield, 1882, Bull. Am. Mus. Nat. Hist., No. 3.  
*bulimiformis* instead of *Polyphemopsis bulimiformis*.  
*canaliculata* instead of *Polyphemopsis canaliculata*.  
*elongata* instead of *Polyphemopsis elongata*.
- CALLONEMA**, Hall, 1879, Pal. N. Y., vol. 5, pt. 2. [Ety. *kallos*, beautiful; *nema*, thread.]  
*bellatulum* instead of *Loxonema bellatulum*, and from the Up. Held. Gr. [Sig. pretty.]  
*imitator* instead of *Pleurotomaria imitator*, and from Ham. Gr.  
*lichas* instead of *Platystoma lichas*.
- CHEMNITZIA tenuilineata**, is from the Choteau Gr.
- CHITON occidentalis**, Hildreth, 1837, Am. Jour. Sci. & Arts, vol. 31, Coal Meas. [Sig. western.]
- CLISOSPIRA occidentalis**, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Trenton Gr. [Sig. western.]
- CYCLONEMA cincinnatense**, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Utica Slate Gr. [Ety. proper name.]  
*doris* instead of *Pleurotomaria doris*.  
*leavenworthanum* instead of *Pleurotomaria leavenworthana*.  
*subangulatum* instead of *Pleurotomaria subangulata*.
- CYCLORA depressa**, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. depressed.]  
*pulcella*, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. beautiful little.]
- CYRTOLITES magnus**, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. large.]  
*nitidulus*, Ulrich, 1878, Jour. Cin. Soc. Nat. Hist., vol. 2, Utica Slate Gr. [Sig. neat.]  
*sinuatus*, Hall & Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Quebec Gr [Sig. sinuated.]
- CYRTONELLA**, Hall, 1879, Pal. N. Y., vol. 5, pt. 2. A subgenus under *Cyrtolites* to include *C. mitella* and *C. pileolus*.
- DENTALIUM aciculatum**, refer to *Coleolus aciculatus*.  
*grandævum* is from the Marshall Gr.  
*martini*, Whitfield, 1882, Desc. New Spec. Foss., from Ohio, Up. Held. Gr. [Ety. proper name.]  
*Discolites*, Emmons, syn. for *Cyclora*.  
*minutus*, see *Cyclora minuta*.
- EUNEMA priscum**, is from the Calciferous Gr.
- EUOMPHALUS ammon**, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Ety. mythological name.]  
*boonensis*, is from the Burlington Gr.  
*decewi*, refer to *Pleuronotus decewi*.  
*gyroceras* Römer, 1852, Kreid. von Tex., Silurian. [Sig. a circular horn.]  
*hecale* var. *corpulens*, Hall, 1879, Pal. N. Y., vol. 5, pl. 27, Chemung Gr. [Sig. corpulent.]  
*luxus*, White, 1875, Expl. W. 100th meridian, Low. Carb. [Sig. dislocated.]  
*macrolineatus*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Sig. long lined.]  
*minutissimus*, Castelnau, 1843, Syst. Sil. Not recognized.  
*ophirensis*, Hall & Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Waverly Gr. [Ety. proper name.]  
*polygyratus*, Römer, 1852, Kreid. von Texas, Silurian. [Sig. many coiled.]  
*sanctisabæ*, Römer, Kreid. von Texas, Silurian. [Ety. proper name.]  
*spirorbis*, is from the Kinderhook Gr.  
*strongi*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Magnesian Gr. [Ety. proper name.]  
*trochiscus*, refer to *Raphistoma trochiscus*.  
*utahensis*, refer to *Straparollus utahensis*.  
*verneuili*, Castelnau, 1843, Syst. Sil. Not recognized.
- EOTRÖCHUS**, Whitfield, 1882, Bull. Am. Mus. Nat. Hist., No. 3. [Ety. *eos*, dawn; *Trochus*, a genus of shells.]  
*concavus*, Hall, instead of *Pleurotomaria concava*.
- FUSISPIRA compacta**, Hall & Whitfield, 1877, U. S. Expl. 40th parallel, Quebec Gr. [Sig. compact.]
- HELICOTOMA naresi**, Etheridge, 1878, Quar. Jour. Geo. Soc., vol. 34, Up. Sil. [Ety. proper name.]  
*serotina*, is from the Corniferous limestone.
- HOLOPEA conica**, is from the Marshall Gr., and *H. eriensis* from the Corniferous limestone.  
*magniventra*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Sig. large bellied.]  
*newtonensis*, Whitfield, 1882, Desc. New Spec. Foss., from Ohio, Kaskaskia Gr. [Ety. proper name.]  
*reversa*, is from the Up. Silurian.  
*sweeti*, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Potsdam Gr. [Ety. proper name.]
- HOLOPELLA mira**, is from the Marshall Gr.  
*Inachus pervetus*, see *Euomphalus pervetus*.  
*ISONEMA bellatulum*, refer to *Callonema bellatulum*.  
*lichas*, refer to *Callonema lichas*.
- LEPETOPSIS**, Whitfield, 1882, Bull. Am. Mus. Nat. Hist., No. 3.

- levettei, White, 1882 (Patella levettei), 11th Rep. Geo. of Indiana, Warsaw Gr. [Ety. proper name.]
- LOXONEMA** attenuatum var. semicostatum, Meek, 1871, Proc. Acad. Nat. Sci., Coal Meas. [Sig. half ribbed.]
- breviculum, Hall, 1879, Pal. N. Y., vol. 5, pt. 2, Ham. Gr. [Sig. somewhat short.]
- cotterana, Billings, 1861, Can. Jour., vol. 6, Corniferous limestone. [Ety. proper name.]
- kanei, Meek, 1865, Am. Jour. Sci. & Arts, 2d ser., vol. 40, Low. Held. Gr. [Ety. proper name.]
- lævisculum, Hall, 1879, Pal. N. Y., vol. 5, pt. 2, Ham. Gr. [Sig. somewhat smooth.]
- laxum, Hall, 1879, Pal. N. Y., vol. 5, pt. 2, Chemung Gr. [Sig. wide.]
- magnum, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Sig. large.]
- macleintochi, Haughton, 1857, Jour. Roy. Dub. Soc., vol. 1, Devonian. [Ety. proper name.]
- parvulum, Whitfield, 1882, Desc. New Spec. Foss., from Ohio, Up. Held. Gr. [Sig. small.]
- plicatum, Whitfield, 1882, Desc. New Spec. Foss., from Ohio, Coal Meas. [Sig. plicated.]
- postrenum, Hall, 1879, Pal. N. Y., vol. 5, pt. 2, Chemung Gr. [Sig. the last.]
- rectistriatum, Hall, 1879, Pal. N. Y., vol. 5, pt. 2, Ham. Gr. [Sig. having straight furrows.]
- rossi, Haughton, 1857, Jour. Roy. Soc. Dub., vol. 1, Devonian. [Ety. proper name.]
- sicula, Hall, 1879, Pal. N. Y., vol. 5, pt. 2, Up. Held. Gr. [Sig. a little dagger.]
- turriforme is from the Kinderhook Gr. *vineta*, refer to Murchisonia vineta.
- MACLUREA** cuneata, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Trenton Gr. [Sig. wedge formed.]
- minima, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Chazy Gr. [Sig. the least.]
- subrotunda, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Trenton Gr. [Sig. somewhat rotund.]
- MACROCHEILUS**. This generic name was preoccupied by Hope, in 1838, for a genus of Coleopterous insects. Bayle has proposed Macrochilina, to which all the species may be referred.
- cooperense, is from the Kaskaskia Gr.
- pinquis, is from the Marshall or Kinderhook Gr.
- priscum, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Up. Held. Gr. [Sig. ancient.]
- subcorpulentum, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Kaskaskia Gr. [Sig. somewhat corpulent.]
- MACROCHILINA**, Bayle, 1880, Journal de Conchyliologie, 3me. ser., t. 19. Proposed instead of Macrocheilus of Phillips, which was preoccupied by Hope. [Ety. diminutive of *Macrocheilus*.]
- METOPTOMA** barabuensis, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Low. Magnesian Gr. [Ety. proper name.]
- cornutiformis, Walcott, 1879, 33d Reg. Rep., Calciferous Gr. [Sig. horn shaped.]
- perovalis, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Trenton Gr. [Sig. oval.]
- recurvus, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Low. Mag. Gr. [Sig. recurved.]
- retrosus, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Potsdam Gr. [Sig. turned back.]
- similis, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Low Mag. Gr. [Sig. similar.]
- MICROCERAS** minutissimum, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. very small.] I think this is identical with *M. inornatum*.
- MURCHISONIA** aciculata, and *M. arisaigensis*, are from the Upper Silurian.
- chamberlini, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Ety. proper name.]
- copei, White, 1882, Rep. Invert. Foss. New Mex., Coal Meas. [Ety. proper name.]
- elegantula*, refer to *Pleurotomaria elegantula*.
- intercedens, Hall, 1879, Pal. N. Y., vol. 5, pt. 2, Up. Held. Gr. [Sig. intervening.]
- latifasciata, Etheridge, 1878, Quar. Jour. Geo. Soc., vol. 34, Up. Sil. [Sig. wide banded.]
- limitaris is from the Kinderhook Gr.
- marcouana, Geinitz, 1866, Carb. und Dyas in Neb., Coal Meas. [Ety. proper name.]
- multigruma, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. much heaped up.]
- neglecta, *M. quadricincta* and *M. Shumardana*, are from the Marshall or Kinderhook Gr.
- obsoleta, Meek, 1871, Proc. Acad. Nat. Sci., Coal Meas. [Sig. obsolete.]
- prolixa, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. prolix.]
- terebra, White, 1879, Bull. U. S. Geo. Sur. Terr., vol. 5, No. 2, Carboniferous. [Sig. an auger.]
- vineta instead of *Loxonema vineta*.
- worthenana, S. A. Miller, 1882, Jour.

- Cin. Soc. Nat. Hist., vol. 5, Niagara Gr. [Ety. proper name.]
- NATICOPSIS aequistriata was first published in 1871, in Proc. Acad. Nat. Sci. comperta, Hall, 1879, Pal. N. Y., vol. 5, pt. 2, pl. 29, Up. Held. Gr. [Sig. ascertained.]
- depressa is from the Marshall or Kinderhook Gr.
- littonana var. genevievensis, Meek & Worthen, 1866, Proc. Acad. Nat. Sci., Kaskaskia Gr. [Ety. proper name.]
- monilifera, White, 1880, 12th Rep. U. S. Geo. Sur. Terr., Up. Coal Meas. [Sig. bead bearing.]
- ortoni, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Coal Meas. [Ety. proper name.]
- ziczac, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Kaskaskia Gr. [Sig. having short, sharp turns.]
- OPHILETA complanata var. nana, Meek, 1870, Hayden's U. S. Geo. Sur. Terr., Calciferous Gr. [Sig. a dwarf.]
- ORMATHICHNUS, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2. [Ety. ormathos, a string of beads; ichnos, a track.] Supposed to be the trail of a Gasteropod.
- moniliformis, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2, Utica Slate Gr. [Sig. like a necklace.]
- PALÆACMÆA irvingi, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Potsdam Gr. [Ety. proper name.]
- PALÆOTROCHUS, Hall, 1879, Pal. N. Y., vol. 5, pt. 2. [Ety. palaios, ancient; Trochus, a genus.]
- kearneyi instead of Pleurotomaria kearneyi.
- PATELLA Linnaeus, 1758, Syst. Nat. 10th Ed. [Ety. patella, a dish.]
- levettei, White, 1882, 11th Rep. Geol. & Nat. Hist. Indiana, Warsaw Gr., refer to Lepetopsis levettei.
- PHANEROTINUS paradoxus is from the Marshall or Kinderhook Gr.
- PHRAGMOSTOMA cunulæ (a little cradle) instead of P. cumulus
- Pileopsis conoides, P. naticoides, P. rotundata, and P. spiralis, Castelnau, 1843, Syst. Sil. Not recognized.
- PLATYCERAS bivolve, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. with two rolls]
- chesterense, Meek & Worthen, 1866, Proc. Acad. Nat. Sci., Kaskaskia Gr. [Ety. proper name.]
- cornuforme and P. vomerium are from the Marshall or Kinderhook Gr.
- herzeri, Winchell, 1870, Notices and Desc. Foss. from Marshall Gr. [Ety. proper name.]
- levigatum, Meek & Worthen, 1866, Proc. Acad. Nat. Sci., Kaskaskia Gr. [Sig. smoothed.]
- minutissimum, Walcott, 1879, 32d Reg. Rep., Calciferous Gr. [Sig. the smallest.]
- PLATYCERAS naticoides, Etheridge, 1878, Quar. Jour. Geo. Soc., vol. 34, Up. Sil. [Sig. like a Natica.]
- paralium, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. that grows by the seaside.]
- squalodens, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Up. Held. Gr. [Sig. a kind of fish tooth.]
- subsinuosum, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Low. Held. Gr. [Sig. somewhat sinuous.] Proposed instead of P. subundatum, M. & W.
- tribulosum, White, 1880, 12th Rep. U. S. Geo. Sur. Terr., Burlington Gr. [Sig. thorny.]
- PLATYSTOMA grayvillense, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Coal Meas. Proposed instead of P. tumidum, M. & W., which was pre-occupied.
- PLEURONOTUS, Hall, 1879, Pal. N. Y., vol. 5, pt. 2. [Ety. pleura, side; notos, back.]
- decewi, instead of Euomphalus decewi.
- PLEUROTOMARIA adjutor, Hall, 1879, Pal. N. Y., vol. 5, pt. 2, Up. Held. Gr. [Sig. a helper.]
- arata var. clausa, Hall, 1879, Pal. N. Y., vol. 5, pt. 2, Up. Held. Gr. [Sig. an inclosed place.]
- broadheadi, White, 1880, 12th Rep. U. S. Geo. Sur. Terr., Coal Meas. [Ety. proper name.]
- coniformis, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Coal Meas. [Sig. cone shaped.] Proposed instead of P. conoides, M. & W.
- doris, refer to Cyclonema doris.
- concaeva, of Hall, refer to Eotrochus concavus.
- elegantula, instead of Murchisonia elegantula.
- gurleyi, Meek, 1871, Proc. Acad. Nat. Sci., Coal Meas. [Ety. proper name.]
- imitator, refer to Callonema imitator.
- itys var. tenuispira, Hall, 1879, Pal. N. Y., vol. 5, pt. 2, Ham. Gr. [Sig. having a slender spire.]
- kearneyi, in the 14th Reg. Rep., refer to Palæotrochus kearneyi.
- laphami, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Ety. proper name.]
- leavenworthana, refer to Cyclonema leavenworthanum.
- meta, Meek and Worthen, 1865, Proc. Acad. Nat. Sci., Keokuk Gr. [Sig. pyramidal.]
- mississippiensis, White and Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Ety. proper name.]
- mitigata, P. quinesulcata, P. rota, P.

- tectoria, and *P. vadosa*, are from the Marshall or Kinderhook Gr.
- PLEUROTOMARIA muralis** is from the Trenton Gr.
- newportensis*, White, 1880, 12th Rep. U. S. Geo. Sur. Terr., Coal Meas. [Ety. proper name.]
- nitela*, Hall, 1879, Pal. N. Y., vol. 5, pt. 2, Up. Held. Gr. [Sig. brightness.]
- perizomata*, White, 1882, Rep. Invert. Foss., New Mex., Coal Meas. [Sig. girdled.]
- quadracarinata* instead of *P. quadricostata*.
- quadrilix*, Hall, 1879, Pal. N. Y., vol. 5, pt. 2, Up. Held. Gr. [Sig. having four whorls (?).]
- racinensis*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Ety. proper name.]
- riddelli* instead of *P. riddlei*.
- rugulata*, Hall, 1860, 13th Reg. Rep. Ham. Gr. [Sig. having wide furrows.]
- subangulata*, refer to *Cyclonema subangulatum*.
- taggarti*, Meek, 1874, 7th Rep. Hayden's U. S. Geo. Sur. Terr., Coal Meas. [Ety. proper name.]
- tenuimarginata*, refer to *Eotrochus concavus*.
- tumida*, refer to *Platystoma grayvillense*.
- POLYPHEMOPSIS bulimiformis**, refer to *Bulimorpha bulimiformis*.
- canaliculata*, refer to *Bulimorpha canaliculata*.
- elongata*, refer to *Bulimorpha elongata*.
- mel-noides*, Whitfield, 1882, Desc. New Spec. Foss., from Ohio, Kaskaskia Gr. [Sig. like a *Melania*.]
- PORCELLIA crassinoda**, White & Whitfield, 1-62 Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. thick noded.]
- rectinoda* is from the Marshall or Kinderhook Gr.
- rotatoria*, refer to *Goniatites plebeiformis*.
- PUPA bigsbyi**, Dawson, 1880, Am. Jour. Sci. & Arts, 3d ser., vol. 20, Coal Meas. [Ety. proper name.]
- RAPHISTOMA acutum**, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Chazy Gr. [Sig. acute.]
- niagarensis*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Ety. proper name.]
- trochiscus*, Meek, 1870 (*Euomphalus trochiscus*), Proc. Acad. Nat. Sci. Calceiferous or Trenton Gr. [Sig. a small round ball.]
- ROTELLA verruculifera**, White, 1882, Rep. Invert. Foss., New Mex., Coal Meas. [Sig. bearing little eminences.]
- SCÆVOGYRA**, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis. [Ety. *scævus* toward the left; *gyrus*, a circle.]
- elevata*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Low. Mag. Gr. [Sig. elevated.]
- obliqua*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Low. Mag. Gr. [Sig. oblique.]
- swezeyi*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Low. Mag. Gr. [Ety. proper name.]
- SOLENISCUS brevis**, White, 1882, Rep. Invert. Foss., New Mex., Coal Meas. [Sig. short.]
- planus*, White, 1882, Rep. Invert. Foss., New Mex., Coal Meas. [Sig. flat.]
- STRAPAROLLUS barrisi**, and *S. macromphalus* from the Marshall or Kinderhook Gr.
- planispira*, *S. quadricolvis*, *S. spergenensis*, and *S. spergenensis* var. *planorbiformis*, refer to *Euomphalus*.
- utahensis*, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Waverly Gr. [Ety. proper name.]
- STROPHITES**, Dawson, 1880, Am. Jour. Sci. and Arts. [Ety. from the genus *Strophia*.]
- grandævus*, Dawson, 1880, Am. Jour. Sci. and Arts, 3d ser., vol. 20, Devonian. [Sig. old aged.]
- STROPHOSTYLUS cyclostomus** var. *disjunctus*, Hall, 1879, 28th Reg. Rep., Niagara Gr. [Sig. disjointed.]
- obliquus*, *S. ovatus*, and *S. subglobosus*, are from the Corniferous limestone.
- SUBULITES gracilis**, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Niagara Gr. [Sig. slender.]
- Tremanotus* is a syn. for *Bucania*. The supposed openings on the cast represent the spines upon the back of the anterior part of the last whorl of the shell, and the fossil is a true *Bucania*.
- alpheus*, syn. for *Bucania chicagoensis*.
- TROCHITA carbonaria** from the Kaskaskia Gr.
- TROCHONEMA beloitense**, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Trenton Gr. [Ety. proper name.]
- beachi*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Trenton Gr. [Ety. proper name.]
- TURBO huronensis**, Castelnau, 1843. Not recognized.
- shumardi*, de Verneuil, 1846, Bulletin de la Soc. Geol. de France, Up. Held. Gr. [Ety. proper name.]
- TURRITELLA schohariensis**, Castelnau, 1843. Not recognized.

CLASS CEPHALOPODA.

- ACTINOCERAS** BEAUDANTI, Castelnau, 1843, Systeme Silurien, Niagara Gr. [Ety. proper name.]
- beaumonti, Castelnau, 1843, Systeme Silurien, Niagara Gr. [Ety. proper name.]
- blainvillei, Castelnau, 1843, Systeme Silurien, Hud. Riv. Gr. (?) [Ety. proper name.]
- cordleri, Castelnau, 1843, Systeme Silurien, Hud. Riv. Gr. (?) [Ety. proper name.]
- deshayesi, Castelnau, 1843, Systeme Silurien, Hud. Riv. Gr. (?) [Ety. proper name.]
- dufresnoyi, Castelnau, 1843, Systeme Silurien, Niagara Gr. [Ety. proper name.]
- Ammonites bellicosus*, Morton, 1836, Am. Jour. Sci. and Arts, vol. 29, Coal Meas. Not recognized.
- colubrellus*, see *Goniatites colubrellus*.
- hildrethi*, see *Goniatites hildrethi*.
- BACTRITES**, Sandberger, 1841, Leonh. u. Bronn's Jahrb. [Ety. *baktron*, a staff.]
- clavus, Hall, 1879, Pal. N.Y., vol. 5, Ham. Gr. [Sig. a spike.]
- Beatricea* should be referred to the sponges.
- COLPOCERAS** clarkei, Wetherby, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Trenton Gr. [Ety. proper name.]
- CYRTOCERAS** *absens*, refer to *Gomphoceras absens*.
- amulum, Hall, 1879, Pal. N. Y., vol. 5, Up. Held. Gr. [Sig. emulous.]
- alternatum, Hall, 1879, Pal. N. Y., vol. 5, Marcellus Shale. [Sig. changed by turns.] Proposed instead of *C. undulatum* of Hall.
- ammon, Billings, 1861, Can. Jour., vol. 6, Corniferous limestone. [Ety. mythological name.]
- amenum, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. welcome.]
- annulatum, Hall, see *C. subannulatum*.
- arcuatum, Hall, see *C. subarcuatum*.
- aristides is a proper name instead of mythological.
- bannisteri, Winchell & Marcy, see *Trochoceras bannisteri*.
- belus, Billings, 1861, Can. Jour., vol. 6, Corniferous Gr. [Ety. proper name.]
- beta is *Gomphoceras beta*.
- cancellatum, Hall, see *C. subcancellatum*.
- cessator, Hall & Whitfield, 1877, U. S. Expl. Exped., 40th parallel, Coal Meas. [Sig. a loiterer.]
- citum, Hall, 1879, Pal. N. Y., vol. 5, Up. Held. Gr. [Sig. speedy.]
- clavatum, refer to *Gomphoceras clavatum*.
- conoidale, Wetherby, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Hud. Riv. Gr. [-ig. conoidal.]
- CYRTOCERAS** *conradi*, Hall, is *Gomphoceras conradi*.
- corniculum*, Hall, see *C. tenuistriatum*.
- cretaceum, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Up. Held. Gr. [Sig. chalky.]
- densum, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. thick.]
- formosum, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. beautiful.]
- gibbosum*, Hall, is a syn. for *Gomphoceras oviforme*.
- hallanum instead of *C. lamellosum*, Hall.
- hector, Hall, 1879, Pal. N. Y., vol. 5, Up. Chemung Gr. [Ety. proper name.]
- infundibulum, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Sig. a funnel.]
- irregulare, Wetherby, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Hud. Riv. Gr. [Sig. irregular.]
- jason*, refer to *Gyroceras jason*.
- markoei, Castelnau, 1843, Systeme Silurien, Trenton Gr. (?) [Ety. proper name.]
- olenus*, Hall, in the addenda to the 1st edition of this work, may be stricken out as the species is now referred to *Trochoceras*.
- orion*, Hall, refer to *Trochoceras orion*.
- planidorsatum, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Trenton Gr. [Sig. having a level back.]
- rectum, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Sig. straight.]
- sacculus*, Meek and Worthen, refer to *Gomphoceras sacculus*.
- unicornie is from the Marshall or Kinderhook Gr.
- DISCITES** *ammonis*, Hall, 1879, Pal. N.Y., vol. 5, Up. Held. Gr. [Sig. of Ammon.]
- inopinatus, Hall, 1879, Pal. N.Y., vol. 5, Up. Held. Gr. [Sig. unexpected.]
- marcellensis instead of *Nautilus marcellensis*.
- ENDOCERAS** *bristolense*, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Ety. proper name.]
- egani, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Ety. proper name.]
- inequabile, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Sig. unequal.]
- lamarecki, Billings, instead of *Orthoceras lamarecki*.
- montrealense, Billings, instead of *Orthoceras montrealense*.
- subannulatum, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Trenton Gr. [Sig. somewhat annulated.]
- GOMPHOCERAS** *abruptum*, Hall, 1879, Pal. N.Y., vol. 5, Ham. Gr. [Sig. abrupt.]



*GOMPHOCERAS absens* instead of *Cyrtoceras absens*.

*ajax*, Hall, 1879, Pal. N. Y., vol. 5, Portage Gr. [Ety. mythological name.]

*amphora*, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Up. Held. Gr. [Sig. a bottle.]

*beta* instead of *Cyrtoceras beta*.

*cammarus*, Hall, 1879, Pal. N. Y., vol. 5, Up. Held. Gr. [Sig. a lobster.]

*clavatum* instead of *Cyrtoceras clavatum*. *conradi* instead of *Cyrtoceras conradi*.

*cruciferum*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Sig. cross bearing.]

*fax*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Sig. a torch.]

*gomphus*, Hall, 1879, Pal. N. Y., vol. 5, Up. Held. Gr. [Sig. a club.]

*hyatti*, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Up. Held. Gr. [Ety. proper name.]

*illænus*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Ety. supposed to be from the genus *Illænus*, but quere ?.]

*impar*, Hall, 1879, Pal. N. Y., vol. 5, Up. Held. Gr. [Sig. unequal.]

*lunatum*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. lunate.]

*manes*, Hall, 1879, Pal. N. Y., vol. 5, Genesee Slate. [Ety. mythological.]

*mitra*, Hall, 1879, Pal. N. Y., vol. 5, Up. Held. Gr. [Sig. a head band.]

*pingue*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. fat.]

*planum*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. even.]

*poculum*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. a cup.]

*potens*, Hall, 1879, Pal. N. Y., vol. 5, Waverly Gr. [Sig. powerful.]

*raphanus*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. a radish.]

*rude*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. rough.]

*sacculus* instead of *Cyrtoceras sacculus*. *sciotoense*. Whitfield, 1882, Desc. New Spec. Foss., from Ohio, Up. Held. Gr. [Ety. proper name.]

*solidum*, Hall, 1879, Pal. N. Y., vol. 5, Marcellus Shale. [Sig. solid.]

*tumidum*, Hall, 1879, Pal. N. Y., vol. 5, Chemung Gr. [Sig. tumid.]

*GONIATITES andrewsi*, Winchell, 1870, Notices and Desc., from Marshall Gr., etc., Marshall Gr. [Ety. proper name.]

*canadensis*, Castelnau, 1843, Syst. Sil. Probably a syn. for *Bellerophon bilobatus*.

*colubrellus*, Morton, 1836 (Ammonites colubrellus), Am. Jour. Sci. & Arts, vol. 29, Waverly Gr. [Sig. a little snake.]

*expansus*, Vanuxem, being preoccupied

by von Buch, in 1838. *G. vanuxemi* has been proposed instead of it.

*GONIATITES goniolobus*, Meek, 1877, U. S. Geo. Sur., 40th parallel, Carboniferous. [Sig. having angular lobes.]

*hildrethi*, Morton, 1836 (Ammonites hildrethi), Am. Jour. Sci. & Arts, vol. 29, Waverly Gr. [Ety. proper name.]

*holmesi*, G. *ixion*, G. *morganensis*, G. *osagensis*, G. *oweni*, and G. *oweni* var. *parallelus*, are from the Choteau or Kinderhook Gr.

*hyas* is a syn. for *G. lyoni*.

*kingi*, Hall & Whitfield, 1877, U. S. Geo. Expl. Exped., 40th parallel, Coal Meas. [Ety. proper name.]

*nundaia* is a syn. for *G. sinuosus*.

*ohioensis*, Winchell, 1870, Notices and Desc. Foss. from Marshall Gr. [Ety. proper name.]

*opimus*, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. plump.]

*plebeiformis*, Hall, 1879, Pal. N. Y., vol. 5, Marcellus Shale. [Sig. from resemblance to *G. plebeius*.] Proposed instead of *Porcellia rotatoria*, Hall, which was preoccupied in this genus. *vanuxemi*, Hall, 1879, Pal. N. Y., vol. 5, Marcellus Shale. [Ety. proper name.] Proposed instead of *G. expansus*, of Vanuxem, which was preoccupied by Von Buch.

*GYROCERAS abruptum*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. abrupt.]

*burlingtonense*, may be referred to *Nautilus burlingtonensis*.

*columbiense*, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Up. Held. Gr. [Ety. proper name.]

*duplicostatum*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Trenton Gr. [Sig. double ribbed.]

*elrodi*, White, 1882, 11th Ann. Rep. Geol. and Nat. Hist. Indiana, Niagara Gr. [Ety. proper name.]

*gracile* is from the Kinderhook Gr.

*jason*, was described by Hall in 1862, in 15th Reg. Rep., under the name of *Cyrtoceras jason*.

*laciniosum*, Hall, 1879, Pal. N. Y., vol. 5, Up. Held. Gr. [Sig. full of points.]

*livatum*, refer to *Nautilus livatus*.

*matheri* is from the Up. Held. Gr.

*pratti*, Barris, 1879, Proc. Dav. Acad. Sci., vol. 2, Up. Held. Gr. [Ety. proper name.]

*seminodosum*, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Up. Held. Gr. [Sig. half nodose.]

*sublivatum*, refer to *Nautilus sublivatus*.

*undulatum* is from the Up. Held. Gr., and dated 1842.

*vagrans* instead of *vagans*.

*Hortholus americanus*, refer to *Lituites americanus*.

- Huronica stokesi*, Castelnau, 1843, Syst. Sil. Schoharie Grit. Not recognized.
- LITUITES** americanus, Emmons, 1856 (Hortholus americanus) Am. Geol., Black Riv. Gr. [Ety. proper name.]
- convolvans*, as identified by Hall, in Pal. N. Y., vol. 1, is described as *L. americanus*.
- multicostatus*, Whitfield, 1880. Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Sig. many ribbed.]
- murchisoni*, Troost. Not defined so as to be recognized.
- Melia cancellatus*, Emmons, 1856, Am. Geol. Not defined so as to be recognized.
- NAUTILUS** acraeus, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. occupying a height.]
- barrandi*, Hall, being preoccupied by Von Hauer in 1850, *N. magister* has been proposed in its place.
- burlingtonensis* instead of *Gyroceras burlingtonense*.
- cavus*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. concave.]
- danvillensis*, White, 1878, Proc. Acad. Nat. Sci., Coal Meas. [Ety. proper name.]
- digonus*, refer to *Trematodiscus digonus*. *liratus* instead of *Gyroceras liratum*.
- liratus* var *juvenis*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. young.]
- magister*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. the chief.] Proposed instead of *N. barrandi*, which was preoccupied.
- marcellensis*, refer to *Discites marcellensis*.
- oceanus*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. the ocean.]
- ortoni*, Whitfield, 1882. Desc. New Spec. Foss. from Ohio, Coal Meas. [Ety. proper name.]
- pauper*, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Kaskaskia Gr. [Sig. poor.]
- subliratus* instead of *Gyroceras subliratum*.
- Nelimenia incognita*, Castelnau, 1843. Syst. Sil. Probably a fragment of *Phragmoceras* or *Oncoceras*.
- ONCOCERAS** brevicurvatum, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Trenton Gr. [Sig. short curved.]
- mummiforme*, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis. Trenton Gr. Sig. mummiform.]
- ORTHO CERAS** *acicula*, refer to *Coleolus acicula*.
- amycus*, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Ety. mythological name.]
- anguis*, Hall, 1879, Pal. N. Y., vol. 5, Chemung Gr. [Sig. a serpent.]
- annulato-costutum*, Meek & Worthen, is *O. randolphense*.
- arcuatellum*, Sandberger, identified by
- Winchell, in Am. Jour. Sci. & Arts, in 1862, is not an American species.
- ORTHO CERAS** *atreus*, Hall, 1879, Pal. N. Y., vol. 5, Portage Gr. [Ety. mythological name.]
- aulax*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. a furrow.]
- bebryx* var. *cayuga*, Hall, 1877, Pal. N. Y., vol. 5, Chemung Gr. [Ety. proper name.]
- beloitense*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Trenton Gr. [Ety. proper name.]
- bipartitum*, Hall, 1879, Pal. N. Y., vol. 5, Up. Chemung Gr. [Sig. two parted.]
- caelamen*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. a bass relief.]
- cancellatum*, Hall, refer to *O. subcancellatum*.
- carltonense*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Ety. proper name.]
- carnosum*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Sig. fleshy.]
- chemungense* and *O. indianense* are from the Kinderhook Gr.
- cingulum*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Sig. a zone.]
- clavatum*, Hall, refer to *O. desideratum*.
- cochleatum*, Hall, 1879, Pal. N. Y., vol. 5, Chemung Gr. [Sig. screw formed.]
- collatum*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Sig. collected.]
- columnare*, Hall, refer to *O. orus*.
- conicum*, Castelnau, 1843, Syst. Sil., Niagara Gr. [Sig. conical.]
- constrictum*, Vanuxem, 1842, Geo. Rep. 3d Dist. N. Y., Ham. Gr. [Sig. constricted.]
- constrictum*, Conrad. Not defined so as to be recognized, and it may be stricken from the list.
- creon*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Ety. proper name.]
- dawsonianum*, n. sp. Carboniferous. Proposed instead of *O. perstrictum*, Dawson, in Acadian Geology, p. 312, fig. 129, as the name was preoccupied by Barrande.
- demus*, Hall, 1879, Pal. N. Y., vol. 5, Chemung Gr. [Sig. at last, solely.]
- elegantulum* is in vol. 5, Can. Nat., and from the Up. Sil.
- filiforme*, Castelnau, 1843, Syst. Sil., Niagara Gr. [Sig. filiform.]
- fluctum*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Sig. waved.]
- fulgidum*, Hall, 1879, Pal. N. Y., vol. 5, Chemung Gr. [Sig. shining.]
- fustis*, Hall, 1879, Pal. N. Y., vol. 5, Marcellus shale. [Sig. a club.]
- griffithi*, Houghton, 1857, Jour. Roy. Dub. Soc., vol. 1, Devonian. ? [Ety. proper name.]
- hartanum*, n. sp., Carboniferous. Proposed instead of *O. laqueatum*, Hartt,

- in Acadian Geol., p. 312, fig. 128, which was preoccupied.
- ORTHO CERAS** *herculaneum*, Verneuil, 1846, Bull. de la Soc. Geol. de France, vol. 4, Low. Sil. [Sig. large of its kind.]
- hercules*, Castelnau, 1843, Syst. Sil. Up. Sil. [Ety. mythological name.]
- hyas* is a syn. for *O. thoas*.
- idmon*, Hall, 1879, Pal. N. Y., vol. 5, p. 302, Ham. Gr. [Ety. mythological name.]
- inoptatum*, Hall, 1879, Pal. N. Y., vol. 5, Up. Held. Gr. [Sig. undesired.]
- isogramma*, Meek, 1871, Proc. Acad. Nat. Sci., Coal Meas. [Sig. equal weight.]
- jaculum*, Hall, 1879, Pal. N. Y., vol. 5, Up. Held. Gr. [Sig. a dart.]
- kingi*, Meek, 1877, U. S. Geo. Sur., 40th parallel, Devonian. [Ety. proper name.]
- læve*, refer to *O. sublæve*.
- laqueatum*, Hartt, refer to *O. harttanum*.
- leander*, Hall, 1879, Pal. N. Y., vol. 5, Chemung Gr. [Ety. proper name.]
- lima*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. a file.]
- linteum*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. a girdle.]
- masculum*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Sig. masculine.]
- medium*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Sig. middle.]
- michiganense*, n. sp., Marshall Gr., in the Southern part of Michigan. Proposed instead of *O. multicinctum*, Winchell, Proc. Acad. Nat. Sci. Phil., Sept., 1862, p. 421.
- moniliforme*, Swallow, refer to *O. swallowanum*.
- multicinctum*, Winchell, being preoccupied by Hall, I have proposed *O. michiganense*.
- nobile*, Meek & Worthen, 1865, Proc. Acad. Nat. Sci., Kaskaskia Gr. [Sig. famous, noted.]
- occidentale*, Winchell, being preoccupied by Swallow, I have proposed *O. vinchellanum*.
- œdipus*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Ety. mythological name.]
- ohioense* instead of *O. pelops* var. *ohioense*.
- ommaneyi*, Salter, 1852, in Sutherland's Jour., vol. 2, Devonian. [Ety. proper name.]
- oneidaense*, Walcott, 1879, Trans. Alb. Inst., vol. x, Utica Slate Gr. [Ety. proper name.]
- oppletum*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Sig. filled up.]
- pacator*, Hall, 1879, Pal. N. Y., vol. 5, Portage Gr. [Sig. a peacemaker.]
- palmatum*, Hall, 1879, Pal. N. Y., vol. 5, Chemung Gr. [Sig. marked with the palm of a hand.]
- pelops* var. *ohioense*, refer to *O. ohioense*.
- ORTHO CERAS** *perstrictum*, Dawson, being preoccupied by Barrande I have proposed *O. dawsonianum*.
- pertextum*, Hall, 1879, Pal. N. Y., vol. 5, Chemung Gr. [Sig. woven throughout.]
- pervicax*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Sig. firm.]
- pravum*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Sig. crooked.]
- punctostriatum* is from the Up. Sil.
- randolphense*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Kaskaskia Gr. [Ety. proper name.] Proposed instead of *O. annulato-costatum*, Meek & Worthen, which was preoccupied.
- scintilla*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. a spark.]
- sicinus*, Hall, 1879, Pal. N. Y., vol. 5, Marcellus Shales. [Ety. proper name.]
- sirpus*, Hall, 1879, Pal. N. Y., vol. 5, Up. Held. Gr. [Sig. a bull rush.]
- spissum*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. compact.]
- swallowanum*, n. sp., Coal Measures in the Valley of Verdigris in Kansas. [Ety. proper name.] Proposed instead of *O. moniliforme*, Swallow, in Trans. St. Louis Acad. Sci., vol. 1, p. 200, which was preoccupied by Hall.
- tantalus*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Ety. mythological name.]
- telamon*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Ety. mythological name.]
- tenere*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. delicate.]
- tersum*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. neat.]
- textum*, Hall, 1879, Pal. N. Y., vol. 5, Ham. Gr. [Sig. that which is braided.]
- thestor*, Hall, 1879, Pal. N. Y., vol. 5, Marcellus Shales. [Ety. mythological name.]
- thyestes*, Hall, 1879, Pal. N. Y., vol. 5, Portage Gr. [Ety. mythological name.]
- varum*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Sig. bent.]
- vastator*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Sig. a destroyer.] Correct in the index, but printed *O. obliquum*, on page 243.
- viator*, Hall, 1879, Pal. N. Y., vol. 5, Up. Held. Gr. [Sig. a traveller.]
- vinchellanum*, n. sp., Marshall Gr. in Southern Michigan. [Ety. proper name.] Proposed instead of *O. occidentale*, Winchell, 1862, Am. Jour. Sci. & Arts, 2d ser., vol. 33, p. 356, which was preoccupied by Swallow.
- wauwatosense*, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Ety. proper name.]
- woodworthi* was proposed by Chesney, in 1865, instead of *O. irreg-*

- ulare of McChesney, which was preoccupied.
- PETALICHNUS**, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2. [Ety. *petalos*, spread out; *ichnos*, track.]
- multipartitus*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2, Utica Slate Gr. [Sig. many parted.]
- PHRAGMOCERAS** *hoyi*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Ety. proper name.]
- hoyi* var. *compressum*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Sig. compressed.]
- labiatum*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Sig. lipped.]
- PILOCERAS** *amplum*, Dawson, 1881, Can. Nat., vol. 10, Calciferous Gr. [Sig. of large extent.]
- Sidemina infundibuliforme*, Castelnau, 1843, Syst. Sil. Probably the fragment of an Endoceras.
- TERATICHNUS**, S. A. Miller, 1880 Jour. Cin. Soc. Nat. Hist., vol. 2. [Ety. *teras*, a wonder; *ichnos*, track.]
- confertus*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2, Utica Slate Gr. [Sig. pressed together.]
- TRACHOMATICHNUS**, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2. [Ety. *trachoma*, that which is made rough; *ichnos*, track.]
- cincinnatiensis*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2, Utica Slate Gr. [Ety. proper name.]
- numerosus*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2, Utica Slate Gr. [Sig. numerous.]
- TRACHOMATICHNUS** *permultus*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2, Utica Slate Gr. [Sig. very many.]
- TREMATOCERAS**, Whitfield, 1882, Desc. New Spec. Foss., from Ohio. [Ety. *trema*, a hole; *keras*, a horn.]
- ohioense*, Whitfield, 1882, Desc. New Spec. Foss., from Ohio, Up. Held. Gr. [Ety. proper name.]
- TREMATODISCUS** *digonus* instead of *Nautilus digonus*.
- konincki*, Wetherby, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Waverly Gr. [Ety. proper name.]
- rockymontanus*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Burlington Gr. [Ety. proper name.]
- TROCHOCERAS** *æneas*, Hall, 1870, Rev. Ed. 20th Reg. Rep. Expl., pl. 25, Niagara Gr. [Ety. mythological name.]
- barrandei*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Ety. proper name.]
- biton*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Ety. mythological name.]
- expansum*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Sig. expanded.]
- orion* instead of *Cyrtoceras orion*.
- pandum*, Hall, 1879, Pal. N. Y., vol. 5, Schoharie Grit. [Sig. crooked.]
- TROCHOLITES** *circularis*, Miller & Dyer, 1878, Cont. to Pal. No. 2, Hud. Riv. Gr. [Sig. circular.]
- minusculus*, Miller and Dyer, 1878, Cont. to Pal. No. 2, Utica Slate Gr. [Sig. rather small.]

## CLASS LAMELLIBRANCHIATA.

- ACTINODESMA** *subrectum*, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Ham. Gr. [Sig. somewhat erect.]
- ALLORISMA** *andrewsi*, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Kaskaskia Gr. [Ety. proper name.]
- antiquum* is from the Kaskaskia Gr.
- elongatum*, Morton, 1836 (*Pholadomya elongata*), Am. Jour. Sci. & Arts. vol. 29, Coal Meas. [Sig. elongated.]
- gilberti*, White, 1879, Bull. U. S. Geo. Sur., vol. 5, No. 2, Carboniferous. [Ety. proper name.]
- maxvillense*, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Kaskaskia Gr. [Ety. proper name.]
- AMBONYCHIA** *retrorsa*, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. turned back.]
- robusta*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Hud. Riv. Gr. [Sig. robust.]
- ANATINA** *leda* is from the Kinderhook Gr.
- ANGELLUM**, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1. [Ety. *aggos*, a pail; *ellus*, diminutive.]
- cuneatum*, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. wedge formed.]
- ANTHRACOPTERA** *polita*, White, 1880, 12th Rep. U. S. Geo. Sur. Terr., Coal Meas. [Ety. polished.]
- Arca modesta* is from the Kinderhook Gr.
- ASTARTELLA** *gurleyi*, White, 1878, Proc. Acad. Nat. Sci., Coal Meas. [Ety. proper name.]
- AVICULA** *æsopus*, A. angustirostra and A. trilobata, from the Ham. Gr., A. magna is from the Kaskaskia Gr., A. subquadrans is Devonian A. textilis var.

- arenaria is from the Oriskany sandstone, and *A. whitei* is from the Kinderhook Gr.
- AVICULA cancellata*, Barris, see *Pterinea cancellata*.
- pecteniformis*, Hall, 1843, Geol. of N.Y., Chemung Gr. The species is an *Aviculopecten*, and the name was preoccupied by Conrad.
- pinnæformis*, Geinitz, 1848 (Solen *pinnæformis*), Versteinerungen d. deutsch Zechsteingebirg, Coal Meas. [Sig. wing-formed.]
- AVICULOPECTEN caroli*, and *A. tenuicostus*, are from the Kinderhook Gr., and *A. oblongus* is from the Warsaw Gr.
- catactus*, Meek, 1877, U. S. Geo. Expl. 40th par., Carboniferous. [Sig. frail.]
- curtocardinalis*, Hall & Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Coal Meas. [Sig. short cardinal.]
- iowensis*, n. sp., Marshall or Kinderhook Gr., at Burlington, Iowa. Proposed instead of *A. occidentalis*, of Winchell, in 1863, in Proc. Acad. Nat. Sci., Phil., p. 9, which was preoccupied by Shumard.
- newarkensis*, Winchell, 1870, Notices & Desc. Foss. from Marshall Gr., Marshall Gr. [Ety. proper name.]
- nodocostatus*, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. having nodes and ribs.]
- occidaneus*, Meek, 1877, U. S. Geo. Expl. 40th parallel, Carboniferous. [Sig. western.]
- parvulus*, Hall & Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Coal Meas. [Sig. little.]
- spinuliferus*, Meek & Worthen, 1870, Proc. Acad. Nat. Sci. Keokuk Gr. [Sig. spine bearing.]
- weberensis*, Hall & Whitfield, 1877, U. S., Geo. Sur., 40th parallel, Coal Meas. [Ety. proper name.]
- CARDINIA æquimarginalis*, refer to *Edmondia æquimarginalis*.
- occidentalis* is from the Kinderhook or Choteau Gr.
- CARDIOLA salteri*, Houghton, 1857, Jour. Roy. Soc. Dub., vol. 1, Devonian. [Ety. proper name.]
- CARDIOMORPHA triangulata* and *C. trigonalis* are from the Choteau or Marshall Gr.
- CARDIOPSIS crenistriata*, refer to *Pterinea crenistriata*.
- CARDIUM nautiloides*, Castelnau, 1843, Syst. Sil., Seneca Lake, N. Y. [Sig. like a Nautilus.]
- CHÆNOMYIA maria*, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Up. Coal Meas. [Ety. proper name.]
- CLEIDOPHORUS chicagoensis*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Niagara Gr. [Ety. proper name.] ellipticus, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. elliptical.]
- CLEIDOPHORUS major*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. larger.]
- semiradiatus* and *C. subovatus* are from the Arisaig series of the Upper Silurian.
- CONOCARDIUM antiquum*, Owen, 1852, Geo. Wis., Iowa & Minn., Silurian. [Sig. ancient.]
- pulchellum*, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. beautiful.]
- CUNEAMYA curta*, Whitfield, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. short.]
- elliptica*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Hud. Riv. Gr. [Sig. elliptical.]
- neglecta* instead of *Sedgwickia neglecta*.
- parva*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Hud. Riv. Gr. [Sig. small.]
- CYPRICARDELLA plicata*, refer to *Goniophora plicata*.
- quadrata*, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. quadrate.]
- CYPRICARDIA choteauensis* and *C. ventricosa*, are from the Choteau or Kinderhook Gr. and *C. shumardana*, from the St. Genevieve limestone or St. Louis Group.
- indianensis*, refer to *Cypricardina* (?) *indianensis*.
- subplana*, refer to *Edmondia subplana*.
- swallovana*, n. sp., Coal Measures of Harrison county, Missouri. Proposed instead of *C. occidentalis*, Swallow, 1863, in Trans. St. Louis Acad. Sci., p. 96.
- CYPRICARDIA indianensis* instead of *Cypricardina indianensis*.
- subovata*, Miller & Dyer, 1878, Cont. to Pal. No. 2, Niagara Gr. [Sig. subovate.]
- CYPRICARDITES bayfieldi*, *C. inconstans* and *C. montrealensis* may be restored to the genus *Vanuxemia*, as it is probably distinct from this genus.
- chemungensis*, refer to *Goniophora chemungensis*.
- megambonus*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Trenton Gr. [Sig. having a large umbo.]
- quadrangularis*, Whitfield, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. quadrangular.]
- sigmoideus* is from the Hud. Riv. Gr.
- DEXIOBIA halli*, and *D. whitei* are from the Marshall Gr.
- EDMONDIA æquimarginalis*, Winchell, 1862 (*Cardinia æquimarginalis*) Proc. Acad. Nat. Sci., Marshall Gr. [Sig. equal margined.]
- bicarinata*, *E. elliptica*, *E. marionensis*, *E. nitida*, *E. nuptialis*, and *E. stri-*

- gillata, are from the Marshall or Chocteau Gr.
- EDMONDIA** inlesi is a typographical error for *E. nilesi*.
- pinonensis*, Meek, 1877, U. S. Geo. Expl. 40th parallel, vol. 4, Devonian. [Ety. proper name.]
- subplana instead of *Cypricardia subplana*.
- GONTIOPHORA** chemungensis, Vanuxem, 1842 (*Cypricardites chemungensis*), Geo. Rep. N. Y., Chemung Gr. [Ety. proper name.]
- plicata instead of *Cypricardella plicata*. speciosa, Hall, 1879, Desc. New Spec. Foss., Niagara Gr. [Sig. beautiful.]
- Isocardia*, jennæ is from the Marshall Gr.
- LEPTODOMUS** undulatus, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Sig. undulated.]
- LITHOPHAGA** illinoisensis, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist. [Ety. proper name.] Proposed instead of the form identified as *L. lingualis* of Phillips.
- lingualis* is not an American species.
- LUCINA** billingsana, n. sp. Devonian. This name is proposed instead of *L. occidentalis*, Billings, 1859, Assiniboine & Saskatchewan, Ex. Exped., p. 187, figs. *b* and *c*. It is from Snake Island, Lake Winnipegosis. The specific name *occidentalis* was preoccupied by Morton for a Cretaceous species.
- LUNULICARDIUM** fragosum, Meek, 1877 (*Posidonomya fragosa*), U. S. Geo. Expl., 40th parallel, Carboniferous. [Sig. rough.]
- MACRODON** cochlearis is from the Marshall Gr.
- MEGALOMUS** compressus, Nicholson & Hinde, 1874, Can. Jour., vol. 14, Niagara Gr. [Sig. compressed.]
- MODIOLOPSIS** cancellata, Walcott, 1879, Trans. Alb. Inst., vol. 10, Utica Slate Gr. [Sig. cancellated.]
- carrollensis, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Galena Gr. [Ety. proper name.] Proposed instead of *M. subnasuta* of Meek & Worthen, 1870, Proc. Acad. Nat. Sci., p. 41, which was preoccupied.
- rectiformis, Worthen, 1882, Bull. No. 1, Ill. St. Mus. Nat. Hist., Trenton Gr. [Sig. straight formed.] proposed instead of *M. orthonota*, Meek & Worthen, 1868, Geo. Sur. Ill., vol. 3, which was preoccupied.
- MODIOMORPHA** concentrica, should be Conrad, 1838 (*Pterinea concentrica*) Ann. Rep. Geo. Sur., N. Y., etc.
- MONOTIS** septentrionalis, Haughton, 1857, Jour. Roy. Dub. Soc., vol. 1. [Sig. northern.]
- MYALINA** apachesi is from the Subcarboniferous; *M. concentrica* from the Warsaw Gr., *M. iowensis* from the Marshall Gr., and *M. perattenuata* was described in 1858.
- MYALINA** iowensis, Winchell, 1865, Proc. Acad. Nat. Sci., Burlington Gr. [Ety. proper name.]
- MYTILARCA** percarinata, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Up. Held Gr. [Sig. very carinate.]
- NUCULA** was described in 1801; *N. hians*, *N. houghtoni* and *N. microdonta* are from the Marshall or Kinderhook Gr. *iowensis* was described in the Proc. Bost. Soc. Nat. Hist., vol. 8, and is a *Tellinomya*. *N. stella* is also a *Tellinomya*.
- nasuta*, refer to *Nuculana nasuta*.
- perumbonata, White, 1879, Bull. U. S. Geo. Sur., vol. 5, No. 2, Carboniferous. [Sig. having a very convex umbo.]
- NUCULANA** dens-mamillata, *N. nuculiformis*, *N. pandoriformis*, and *N. saccata* are from the Marshall Gr.
- nasuta* instead of *Nucula nasuta*.
- obesa, White, 1879, Bull. U. S. Geo. Sur., vol. 5, No. 2, Carboniferous. [Sig. plump.]
- NUCULITES** mactroides is from the Marshall Gr.
- sulcatinus* is from the Marshall Gr., and is a *Tellinomya*.
- triangularis, Hall & Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Devonian. [Sig. triangular.]
- yoldiiformis, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. shaped like a Yoldia.] It is not a *Nuculites*.
- ORTHODESMA** byrnesi, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Hud. Riv. Gr. [Ety. proper name.]
- cuneiforme, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Hud. Riv. Gr. [Sig. wedge formed.]
- mickelboroughi, Whitfield, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Ety. proper name.]
- occidentale, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 3, Hud. Riv. Gr. [Sig. western.]
- subovale, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. suboval.]
- ORTHONOTA** phaselia is from the Marshall Gr.
- ventricosa, White & Whitfield, 1862, Proc. Bost. Soc. Nat. Hist., vol. 8, Kinderhook Gr. [Sig. ventricose.]
- ORTHONOTELLA**, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5. [Ety. *orthos*, straight; *notos*, back; *ellus*, diminutive.]
- faberi, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Hud. Riv. Gr. [Ety. proper name.]
- Ostrea* patercula, Winchell, is from the Marshall Gr.
- PALEONEILO** similis, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Erie Shale, Portage (?) Gr. [Sig. similar.]

- PARACYCLAS peroccidens*, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel. Devonian. [Sig. far western.]  
*sabini* is from the Chemung Gr.
- PERNOPECTEN limatus* is from the Marshall Gr.
- Pholadomya elongata* is *Allorisma elongatum*.
- PINNA ludlovi*, Whitfield, 1876, in Ludlow's Carroll to Yellowstone Park, Coal Meas. [Ety. proper name.]  
*maxvillensis*, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Kaskaskia Gr. [Ety. proper name.]  
*missouriensis* is from the St. Genevieve limestone, or St. Louis Gr.
- Pleurorhynchus antiqua* is *Conocardium antiquum*.
- POSITONIA clathrata*, *P. distans*, and *P. perstriata* were described in 1853.
- POSITONOMYA ambigua* is from the Marshall Gr.  
*fragosa*, Meek, 1877, U. S. Geo. Expl., 40th parallel, refer to *Lunulicardium fragosum*.
- PRISCONAIA*, Conrad, 1867, Am. Jour. Conch., vol. 3. [Ety. proper name.]  
*ventricosa*, Conrad, 1867, Am. Jour. Conch., vol. 3, Coal Meas. [Sig. ventricose.]  
*Pseudomonotis curta* is jurassic.
- PTERINEA brisa* is probably a syn. for *P. striacosta*.  
*cancellata*, Barris, 1879 (*Avicula cancellata*) Proc. Dav. Acad. Sci. Corniferous limestone. [Sig. cancellated.]  
*concentrica* is *Modiomorpha concentrica*.  
*crenistriata*, Winchell, 1862/ (*Cardiopsis crenistriata*), Proc. Acad. Nat. Sci., Marshall Gr. [Sig. having wrinkled striae.]  
*mucronata*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. pointed.]  
*neglecta*, McChesney, 1861, New Palæozoic Fossils, Niagara Gr. [Sig. overlooked.]  
*newarkensis*, Meek, 1871, Proc. Acad. Nat. Sci., Waverly Gr. [Ety. proper name.]  
*similis*, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Marcellus Shale. [Sig. similar.]  
*spinalata*, Winchell, 1865, Proc. Acad. Nat. Sci., Burlington (?) Gr. [Sig. spine winged.]
- PTERONITES spergenensis*, Whitfield, 1882, Bull. Am. Mus. Nat. Hist., No. 3, Warsaw Gr. [Ety. proper name.]
- PYANOMYA*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4. [Ety. *pyanos*, a bean; *Mya*, a genus.]  
*gibbosa*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4., Hud. Riv. Gr. [Sig. gibbous.]
- PTYCHODESMA knappanum* is from the Ham. Gr.
- SANGUINOLARIA leptogaster* is from the Marshall or Kinderhook Gr.
- SANGUINOLITES chemungensis*, refer to *Goniophora chemungensis*.  
*amygdalinus*, S. iowensis, S. jejunos, S. missouriensis, S. nasutus, S. strigatus and S. sulciferus are from the Marshall or Kinderhook Gr.  
*naiadiformis*, Winchell, 1870, Notices & Desc. Foss. from the Marshall Gr. [Sig. like a water nymph.]  
*securis*, Winchell, 1870, Notices & Desc. Foss. from Marshall Gr. [Sig. broad-edged axe.]  
*sulciferus* is from Proc. Acad. Nat. Sci., 1863.
- SCHIZODUS subtrigonalis*, Meek, 1871, Proc. Acad. Nat. Sci., Waverly Gr., [Sig. subtrigonal.]
- SEDGWICKIA lunulata*, Whitfield, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. resembling a little crescent.]  
*neglecta*, is *Cuneamya neglecta*.
- TELLINOMYA angustata*, and *T. attenuata* are from the Upper Silurian.  
*cingulata*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. girded.]  
*iowensis* instead of *Nucula iowensis*.  
*stella* instead of *Nucula stella*.  
*sulcatina* instead of *Nuculites sulcatus*.
- Unio orthonotus* is *Modiolopsis orthonota*.  
*primigenius* is *Modiolopsis primigenia*.
- VANUXEMIA*, Billings, 1858, Can. Nat. & Geol., vol. 3. [Ety. proper name.]  
This genus may be restored as it is probably distinct from *Cypricardites* though related to it. The species are *V. bayfieldi*, *V. inconstans*, *V. dixonensis*, *V. montrealensis* and *V. tomkinsi*.  
*tomkinsi*, Billings, 1860, Can. Jour., vol. 6, Corniferous limestone. [Ety. proper name.]
- YOLDIA rushensis*, McChesney, instead of *Y. gibbosa*, McChesney, as the latter was preoccupied. And *Y. knoxensis* instead of *Y. polita* for like reason.



# SUBKINGDOM ARTICULATA.\*

## CLASS ANNELIDA.

- ARABELLITES, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35.
- ascialis, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. axe shaped.]
- cervicornis, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. deer horned.]
- cornutus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. horned.]
- crenulatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. crenulated.]
- cristatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. tufted.]
- cuspidatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. pointed.]
- elegans, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Clinton Gr. [Sig. elegant.]
- gibbosus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. gibbous.]
- hamatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. hooked.]
- lunatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. lunate.]
- obliquus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. oblique.]
- ovalis, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. oval.]
- pectinatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. pectinated.]
- quadratus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Silurian [Sig. quadrate.]
- rectus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. straight.]
- scutellatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. scutellated.]
- similis, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Niagara Gr. [Sig. similar.]
- CONCHICOLITES is regarded by Prof. Hall as a syn. for Cornulites.
- CORNULITES clintoni, Hall, 1879, 28th Reg. Rep., Clinton Group. [Ety proper name.] This name was proposed instead of *C. flexuosus* which is preoccupied, when *Conchicolites* is regarded as synonymous with *Cornulites*.
- DISTACODUS, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35. [Ety. *distazo* to doubt; *odous* a tooth.]
- incurvus, Pander, 1856, (*Machairodus incurvus*.) Monogr. d. foss. Fische. d. Silur. syst., Hud. Riv. Gr. [Sig. incurved.]
- DREPANODUS, Pander, 1856, Monogr. d. foss. Fische. d. Silur. syst. [Ety. *dre-pane*, a sickle; *odous* tooth.]
- arcuatus, Pander, 1856, Monogr. d. foss. Fische. d. Silur. syst., Hud. Riv. Gr. [Sig. arcuate.]
- Eotrophonia*, Ulrich, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1. Not satisfactorily defined.
- setigera*, Ulrich, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1. Not satisfactorily defined, and specimen too poor for definition.
- EUNICITES, Ehlers, 1868, Palaeontographica vol. 17. [Ety. from the genus *Eunice*, a Nereid; and *lithos*, stone.]
- alveolatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. hollowed out like a tray.]
- chiromorphus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond. vol. 35, Clinton Gr. [Sig. hand formed.]
- clintonensis, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Clinton Gr. [Ety. proper name.]
- compactus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. compact.]
- contortus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. contorted.]
- coronatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Clinton Gr. [Sig. coronated.]
- digitatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. digitated.]
- gracilis, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. slender.]
- major, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. larger.]
- nanus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. a dwarf.]

\* NOTE.—I have included here the Conodonts, because there is no good reason why they should be placed in the Class Pisces.

- EUNICITES palmatus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. palmate.]
- perdentatus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. many toothed.]
- politus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. polished.]
- similis*, var. *arcuatus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. arcuate.]
- simplex*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. simple.]
- tumidus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. tumid.]
- GLYCERITES**, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35. [Ety. from the genus *Glyceris*; and *lithos*, stone.]
- calceolus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Niagara Gr. [Sig. a little shoe.]
- sulcatus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. furrowed.]
- sulcatus*, var. *excavatus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. excavated.]
- LUMBRICONEREITES**, Ehlers, 1868, Palæontographica, vol. 17. [Ety. from the genera *Lumbricus* and *Nereis*; and *lithos*, stone.]
- armatus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Clinton Gr. [Sig. armed.]
- basalis*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Clinton Gr. [Sig. pertaining to the base.]
- dactylodus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. finger-toothed.]
- triangularis*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Clinton Gr. [Sig. triangular.]
- Machairodus*, Pander, 1856. This name was preoccupied. See *Distacodus*.
- incurvus*, see *Distacodus incurvus*.
- MONOCRATERION**, Torell, 1869, Acta universitatis lundensis. [Ety. *monos*, one; *kraterion*, a small basin.]
- lesleyi*, Prime, 1878, Geo. Sur. Pa. DD, Calciferous (?). Gr. [Ety. proper name.]
- NEREIDAVUS**, Grinnell, 1877, Am. Jour. Sci. and Arts, 3d ser., vol. 14. [Ety. *Nereis*, a genus; *avus*, grandfather.]
- solitarius*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. solitary.]
- variatus*, Grinnell, 1877, Am. Jour. Sci. and Arts, 3d ser., vol. 14, Hud. Riv. Gr. [Sig. variable.]
- OENITES**, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35. [Ety. *Oenas*, a genus; *lithos*, stone.]
- amplus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Clinton Gr. [Sig. ample.]
- OENITES carinatus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. carinated.]
- cuneatus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. wedged.]
- curvidens*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. bent toothed.]
- fragilis*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Clinton Gr. [Sig. fragile.]
- inaequalis*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. unequal.]
- infrequens*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Clinton Gr. [Sig. infrequent.]
- rostratus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. beaked.]
- serratus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. serrated.]
- Planolites*, Nicholson, 1873, Proc. Roy. Soc. [Ety. *planos*, a wanderer; *lithos*, stone.] Syn. for *Palæophycus*.
- vulgaris*, Nicholson, a *Palæophycus*.
- POLYGNATHUS**, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35. [Ety. *polys*, many; *gnathos*, a jaw.]
- coronatus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. coronated.]
- crassus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. thick.]
- cristatus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. tufted.]
- curvatus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. curved.]
- dubius*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. doubtful.]
- duplicatus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. duplicated.]
- erensis*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Ety. proper name.]
- immersus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. immersed.]
- linguiformis*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. tongue-shaped.]
- nasutus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. nasute.]
- palmatus*, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. palmate.]
- pennatus*, Hinde, 1879, Quar. Jour. Geo.

- Soc. Lond., vol. 35, Ham. Gr. [Sig. winged.]
- POLYGNATHUS** princeps, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. the chief.]
- punctatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. punctated.]
- radiatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. radiated.]
- serratus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. serrated.]
- simplex, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. simple.]
- solidus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. solid.]
- truncatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. truncated.]
- tuberculatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. tuberculated.]
- PRIONIODUS**, Pander, 1856, Monogr. d. foss. Fische d. Silur. Syst. [Ety. *prionion*, a small saw; *odous*, a tooth.]
- abbreviatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. abbreviated.]
- acicularis, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. acicular.]
- alatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. winged.]
- angulatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. angulated.]
- armatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. armed.]
- elegans, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. elegant.]
- erraticus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. erratic.]
- furcatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. forked.]
- panderi, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Ety. proper name.]
- politus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. polished.]
- PRINOIDUS** radicans, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Hud. Riv. Gr. [Sig. rooting.]
- spicatus, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Ham. Gr. [Sig. spiked.]
- PROTOSCOLEX**, Ulrich, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1. [Ety. *protos*, first; *skolex*, a worm.]
- covingtonensis, Ulrich, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Utica Slate Gr. [Ety. proper name.]
- ornatus, Ulrich, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Utica Slate Gr. [Sig. ornate.]
- simplex, Ulrich, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Utica Slate Gr. [Sig. simple.]
- tenuis, Ulrich, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Utica Slate Gr. [Sig. slender.]
- SCOLITHUS** is doubtless the work of some kind of a borer.
- tuberosus, Miller & Dyer, 1878, Cont. to Pal. No. 2, Hud. Riv. Gr. [Sig. full of humps.]
- woodi, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Potsdam Gr. [Ety. proper name.]
- SERPULA** insita, White, 1878, Proc. Acad. Nat. Sci., Coal Meas. [Sig. inserted.]
- SPIRORBIS** anthracosia, Whitfield, 1881, Am. Jour. Sci. and Arts, 3d ser., vol. 21, Coal Meas. [Sig. pertaining to coal.]
- cinnamatus, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Ety. proper name.]
- omphalodes, Goldfuss, 1826, Germ. Petref., Up. Held. and Ham. Gr. [Sig. like a navel or boss.]
- spinuliferus, Nicholson, 1875, Pal. Prov. Ont., Ham. Gr. [Sig. spine bearing.]
- STAUROCEPHALITES**, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35. [Ety. *stauros*, a cross; *kephale*, head; *lithos*, stone.]
- niagarensis, Hinde, 1879, Quar. Jour. Geo. Soc. Lond., vol. 35, Niagara Gr. [Ety. proper name.]
- WALCOTTIA**, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1. [Ety. proper name.]
- cookana, Miller & Dyer, 1878, Cont. to Pal. No. 2, Hud. Riv. Gr. [Ety. proper name.]
- rugosa, Miller & Dyer, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. rugose.]

## CLASS CRUSTACEA.

- ACIDASPIS fimbriata*, Hall, 1879, Desc. New Spec. Foss. from Niagara Gr. [Sig. fimbriated.]  
*parvula*, Walcott, 31st Reg. Rep.
- AGLASPIS eatoni*, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Potsdam Gr. [Ety. proper name.]
- AGNOSTUS communis*, Hall & Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Potsdam Gr. [Sig. common.]  
*neon*, Hall & Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Potsdam Gr. [Ety. proper name.]  
*prolongus*, Hall & Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Potsdam Gr. [Sig. prolonged.]  
*tumidosus*, Hall & Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Potsdam Gr. [Sig. high swelling.]
- AGRAULOS woosteri*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Potsdam Gr. [Ety. proper name.]
- AMPHIPELTIS* is from *Amphi*, on both sides, instead of doubtful.
- Arctinurus*, Castelnau, syn. for *Lichas*.
- ARGES*, signifies bright or shining, instead of a mythological name.
- ARIONELLUS convexus*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Potsdam Gr. [Sig. convex.]  
*pustulatus*, Walcott, 31st Reg. Rep.
- ASAPHOIDICHNUS*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2. [Ety. *Asaphus*, a genus; *eidos*, form; *ichnos*, track.]  
*dyeri*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2, Utica Slate Gr. [Ety. proper name.]  
*trifidus*, S. A. Miller, 1880, Jour. Cin. Soc. Nat. Hist., vol. 2, Utica Slate Gr. [Sig. trifid.]
- ASAPHUS caudatus*, Green, syn. for *Dalmanites limulus*. (?)  
*cordieri*, Castelnau, syn. for *Dalmanites limulus*.  
*crypturus* was described by Green in 1834, Trans. Geo. Soc. Penn., vol. 1, pt. 1.  
*ditmarsia*, Honeyman, 1879, Proc. Nova Scotia Inst., vol. 5, Lower Silurian. [Ety. proper name.]  
*edwardsi*, Castelnau, syn. for *Dalmanites limulus*.  
*homalonotoides* is in 31st Reg. Rep. N. Y.  
*murchisoni*, Castelnau, syn. for *A. gigas*.  
*nodostriatus*, Hall, 1847, Pal. N. Y., vol. 1. Not defined so as to establish a species.  
*triangulatus*, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Trenton Gr. [Sig. triangular.]
- ATOPS*, Emmons, 1844, Taconic System. This genus should probably be restored because it is distinct from *Triarthrus*. There is only one species defined. *Atops trilineatus*. It is related to *Conocephalites*, and as a generic name has priority.
- BATHYURUS pogonipensis*, Hall and Whitfield, 1877, U. S. Geo. Expl. 40th parallel, Quebec Gr. [Ety. proper name.]
- BEYRICHIA lithofactor* should be defined as maker of stone, and so also *B. petrifactor*.  
*persulcata*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist. vol. 2, Hud. Riv. Gr. [Sig. very much furrowed.]  
*regularis* was named from the regular bars instead of "formed in bars."
- BRONTEUS* was defined by Goldfuss in 1839, in *Nova Act. Phys. Med. Cæsareæ Leop-Carol. Nat. Curios.* xix., pt. 1, p. 360.  
*canadensis*, Logan, 1846, Rep. Geo. Sur. Canada, Low. Held. Gr. [Ety. proper name.]  
*flabellifer*, Goldfuss, Nova. Acta Acad. Cæs. Leop. Nat. Cur. vol., 19 Up. Silurian. [Sig. a fan bearer.]  
*laphami*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Ety. proper name.]
- CALYMENE christyi* is from the Hud. Riv. Gr. conradi, Emmons, 1856, Am. Geol., Lorraine Shales or Hud. Riv. Gr. [Ety. proper name.]  
*nasuta*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist. vol. 2, Niagara Gr. [Sig. nasute.]  
*rostrata*, Vogdes, 1880, Proc. Acad. Nat. Sci., Clinton Gr. [Sig. hooked.]
- CERATIOCARIS grandis*, Poffiman, 1881, Bull. Buf. Soc. Nat. Hist., vol. 4, Waterlime Gr. [Sig. grand.]
- CERAURUS rarus* is in 31st Reg. Rep.
- CHARIOCEPHALUS tumifrons*, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Potsdam Gr. [Sig. having a tumid front.]
- CONOCEPHALITES binodosus* instead of *C. binodus*.  
*calciferus*, Walcott, 1879, 32 Reg. Rep., Calciferous Gr. [Sig. calciferous.]  
*calymenoides*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Potsdam Gr. [Sig. like a Calymene.]  
*explanatus*, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Potsdam Gr. [Sig. spread out.]  
*harti*, Walcott, 1879, 32d Reg. Rep., Calciferous Gr. [Ety. proper name.]  
*laticeps*, Hall & Whitfield, 1877, U. S.

- Geo. Expl., 40th parallel, Potsdam Gr. [Sig. having a wide head.]
- CONOCEPHALITES** quadratus, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Potsdam Gr. [Sig. quadrate.]
- subcoronatus, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Quebec Gr. [Sig. somewhat coronated.]
- CREPICEPHALUS** angulatus, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Potsdam Gr. [Sig. angulated.]
- anytus, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Potsdam Gr. [Ety. proper name.]
- centralis, Whitfield, 1877, Rep. on Pal. of the Black Hills, Potsdam Gr. [Sig. central.]
- gibbesi, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Potsdam Gr. [Ety. proper name.]
- granulosus, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Potsdam Gr. [Sig. granulous.]
- haguei, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Potsdam Gr. [Ety. proper name.]
- maculosus, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Potsdam Gr. [Sig. spotted.]
- nitidus, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Potsdam Gr. [Sig. neat.]
- opustus, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Potsdam Gr. [Sig. full.]
- planus, Whitfield, 1877, Rep. on Pal. of Black Hills, Potsdam Gr. [Sig. plane.]
- quadrans, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Quebec Gr. [Sig. a quarter.]
- simulator, Hall & Whitfield, 1877, U. S. Geo. Expl., 40 parallel, Potsdam Gr. [Sig. an imitator.]
- unisulcatus, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Potsdam Gr. [Sig. one furrowed.]
- CYTHERE carbonaria**, refer to *Leperditia carbonaria*.
- irregularis, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Sig. irregular.] The species does not belong to this genus.
- CYTHERELLINA**, Jones & Hall.
- glandella, Whitfield, 1882, Bull. No. 3, Am. Mus. Nat. Hist., Warsaw Gr. [Sig. a small kernel.]
- CYTHEROPSIS** rugosa, is *Primitia rugosa*.
- DALMANITES** calliteles, signifies a beautiful tail.
- intermedius is in 31st Reg. Rep.
- DICELLOCEPHALUS**, see *Pterocephalia*, which has priority.
- barabuensis, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Low. Magnesian Gr. [Ety. proper name.]
- bilobatus, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Potsdam Gr. [Sig. two lobed.]
- eatoni, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Low. Magnesian Gr. [Ety. proper name.]
- DICELLOCEPHOLUS** flabellifer, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Potsdam Gr. [Sig. a fan bearer.]
- gothicus, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Potsdam Gr. [Sig. gothic.]
- lodensis, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Potsdam Gr. [Ety. proper name.]
- multicinctus, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Potsdam Gr. [Sig. many girded.]
- quadriceps, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Quebec Gr. [Sig. square headed.]
- sancti-sabæ, Rømer, 1849, Texas Mit. naturwissensch. Anhang. (*Pterocephalia sancti-sabæ*), and 1852, Kreid von Texas, Potsdam Gr. [Ety. proper name.]
- wahsatchensis, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Quebec Gr. [Ety. proper name.]
- DOLICHOPTERUS** mansfieldi, Hall, 1877, Trans. Am. Phil. Soc., Lower Coal Meas. [Ety. proper name.]
- ECHINOCARIS**, Whitfield, 1880, Am. Jour. Sci. and Arts, 3d ser., vol. 19. [Ety. *echinos*, the sea urchin; *karis*, a shrimp.]
- multinodosa, Whitfield, 1880, Am. Jour. Sci. and Arts, 3d ser., vol. 19, Erie Shales. [Sig. many noded.]
- pustulosa, Whitfield, 1880, Am. Jour. Sci. and Arts, 3d ser., vol. 19, Erie Shales. [Sig. pustulous.]
- sublævis, Whitfield, 1880, Am. Jour. Sci. and Arts, 3d ser., vol. 19, Erie Shales. [Sig. somewhat smooth.]
- ECHINOGNATHUS**, Walcott, 1882, Am. Jour. Sci. and Arts, 3d ser., vol. 23. [Ety. *echinos*, sea urchin; *gnathos*, the jaw.]
- clevelandi, Walcott, 1882, Am. Jour. Sci. and Arts, 3d ser., vol. 23, Utica Slate Gr. [Ety. proper name.]
- Elliptocephala curta* is *Olenellus curtus*, and *E. asaphoides* is *O. asaphoides*. *Olenellus* is a syn. for *Elliptocephala* of Emmons, but the latter name being preoccupied, *Olenellus* must be used.]
- ENCERINURUS** egani, S. A. Miller, 1880, Jour. Cin. Soc. Nat., Hist., vol. 2, Niagara Gr. [Ety. proper name.]
- mirus. This is not an *Encerinurus*, but I am not able to refer it satisfactorily to any genus.
- trentonensis, and *E. varicostatus* are in the 31st Reg. Rep.
- Enoploura*, Wetherby, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1. Proposed instead of *Anomalocystites* upon the ground that it is a Crustacean instead of a Cystidean.
- ESTHERIA**, Ruppell and Straus-Durckheim, 1837, Mus. Senckenberg. vol. 2, p. 119. [Ety. proper name.]

- ESTHERIA pulex*, Clarke, 1882, Am. Jour. Sci. and Arts, 3d ser., vol. 23, Ham. Gr. [Sig. a flea.]
- EURYPTERUS eriensis*, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Low. Held. Gr. [Ety. proper name.]
- pennsylvanicus*, Hall, 1877, Trans. Am. Phil. Soc., Devonian. [Ety. proper name.]
- pulicaris*, signifies like a flea.
- EUSARCUS*, Grote and Pitt, 1877, Bull. Buf. Soc. Nat. Hist., vol. 4. [Ety. *eu*, well off; *sarkos*, flesh.]
- grandis*, Grote and Pitt, 1877, Bull. Buf. Soc. Nat. Hist., vol. 4, Waterlime Gr. [Sig. grand.]
- scorpionis*, Grote and Pitt, 1877, Bull. Buf. Soc. Nat. Hist., vol. 4, Waterlime Gr. [Sig. scorpion.]
- Helminthoidichnites marinus*, is *Gordia marina*, Emmons, 1844, Taconic Syst.
- HOMALONOTUS atlas*, *H. giganteus* and *H. herculeus* of Castlenau are synonyms for *H. delphinocephalus*, or they are not recognized for want of proper definition.
- ILLÆNURUS convexus*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Low. Mag. Gr. [Sig. *convex*.]
- ILLÆNUS indeterminatus* is in 31st. Reg. Rep. N. Y.
- niagarensis*, Whitfield, 1880, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Ety. proper name.]
- pterocephalus*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Niagara Gr. [Sig. winged head.]
- ISOCHILINA jonesi*, Wetherby, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Trenton Gr. [Ety. proper name.]
- ISOTELUS canalis* is from the Chazy Gr.
- megistos* was described in the Trans. Assoc. Am. Geol. and Naturalists.
- LEPERDITIA angulifera*, Whitfield, 1882, Desc. New. Spec. Foss. from Ohio, Low. Held. Gr. [Sig. bearing angles.]
- billingsi*, Jones, 1881, Ann. & Mag. Nat. Hist., 5th ser., vol. 18, Trenton Gr. [Ety. proper name.]
- bivertex*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Utica Slate Gr. [Sig. two headed.]
- cæcigena*, S. A. Miller, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Hud. Riv. Gr. [Sig. born blind.]
- carbonaria*, instead of *Cythere carbonaria*.
- crepiformis*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Hud. Riv. Gr. [Sig. boot form.]
- radiata*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Utica Slate Gr. [Sig. radiated.]
- unicornis*, Ulrich, 1879, Jour. Cin. Soc. Nat. Hist., vol. 2, Utica Slate Gr. [Sig. one horned.]
- LICHAS emarginatus*, Hall, 1879, 28th Reg. Rep., Niagara Gr. [Sig. emarginated.]
- LICHAS harrisi*, S. A. Miller, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, Hud. Riv. Gr. [Ety. proper name.]
- Lisgocaris*, Clarke, 1882, Am. Jour. Sci. and Arts, 3d ser., vol. 23. [Syn. for *Spathiocaris*.]
- lutheri*, Clarke, 1882, Am. Jour. Sci. and Arts, 3d ser., vol. 23, Ham. Gr., refer to *Spathiocaris lutheri*.
- MICRODISCUS lobatus* is from the Taconic or Lower Potsdam, and *M. speciosus* was described in 1873.
- OGYGIA parabola*, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Quebec Gr. [Sig. a parabola.]
- producta*, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Quebec Gr. [Sig. extended.]
- OLENELLUS asaphoides* was described in the Taconic System.
- curtus*, Whitfield, 1878 (*Elliptocephalus curtus*), Ann. Rep. Geo. Sur. Wis., Potsdam Gr. [Sig. short.]
- PALEOPLAEMON*, Whitfield, 1880, Am. Jour. Sci. and Arts, 3d ser., vol. 19. [Ety. *palaio*, ancient; *Plæmon*, a genus.]
- newberryi*, Whitfield, 1880, Am. Jour. Sci. and Arts., 3d ser., vol. 19, Erie Shales. [Ety. proper name.]
- PHILLIPSIA tennesseensis* is from the Kinderhook Gr.
- tuberculata*, Meek & Worthen, 1870, Proc. Acad. Nat. Sci., Burlington Gr. [Sig. tuberculated.]
- PLUMULITES* was described by Barrande, 1872, Syst. Sil. Boh. Instead of *Plumulites*, English authors use *Turrilepis*, proposed by Woodward in 1865, but not defined so as to be understood.
- devonicus*, Clarke, 1882, Am. Jour. Sci. and Arts, 3d ser., vol. 23, Ham. Gr. [Sig. devonian.]
- newberryi*, Whitfield, 1882, Desc. New Spec. Foss. from Ohio, Portage Gr. [Ety. proper name.]
- PRIMITIA rugosa* instead of *Cytheropsis rugosa*.
- PROETUS auriculatus*, *P. doris* and *P. swalovi* are from the Waverly, Choteau or Kinderhook Gr.
- davenportensis*, Barris, 1879, Proc. Dav. Acad. Sci., Corniferous limestone. [Ety. proper name.]
- denticulatus*, Meek, 1877, U. S. Geo. Expl., 40th parallel, Devonian. [Sig. denticulated.]
- granulatus*, Wetherby, 1881, Jour. Cin. Soc. Nat. Hist., vol. 4, Kaskaskia Gr. [Sig. granulated.]
- loganensis*, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Waverly Gr. [Ety. proper name.]
- parviusculus* was described in the 13th Reg. Rep. 1860, from the Hud. Riv. Gr.
- peroccidens*, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th parallel, Waverly Gr. [Sig. from the far west.]

*PROTICHNITES alternans*, P. *latus*, P. *lineatus*, P. *multinotatus*, P. *octo-notatus* and P. *septem-notatus* are from the Potsdam Gr.

*PTEROCEPHALIA* Roemer, 1849, Texas, Mit naturwissench. Anhang. Bonn., and afterward in 1852, Kreid von Texas. [Ety. *pteron* wing; *kephale* head.] It is identical with *Dicelloccephalus*, and has priority of definition, and was illustrated the same year.

*sancti-sabæ*, Roemer, 1849, Texas. Mit naturwissench. Anhang., and in 1852, Kreid von Texas., Potsdam Gr. [Ety. proper name.]

*PTERYGOTUS buffaloensis*. Pohlman, 1881, Bull. Buf. Soc. Nat. Hist., vol. 4, Waterlime Gr. [Ety. proper name.] *cummingsi*, Grote & Pitt, 1877. Bull. Buf. Soc. Nat. Hist., vol. 4, Waterlime Gr. [Ety. proper name.]

*PTYCHASPIS minuta*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Potsdam Gr. [Sig. minute.]

*pustulosa*, Hall & Whitfield, 1877, U. S. Geo. Expl., 40th Parallel, Potsdam Gr. [Sig. pustulous.]

*speciosa*, Walcott, 1879, 32d Reg. Rep. [Sig. beautiful.]

*striata*, Whitfield, 1878, Ann. Rep. Geo. Sur. Wis., Potsdam, Gr. [Sig. striated.]

*RHACHURA*, Scudder, 1878, Proc. Bost. Soc.

Nat. Hist. [Ety. *rachis*, a ridge; *oura*, tail.]

*RHACHURA venosa*, Scudder, 1878, Proc. Bost. Soc. Nat. Hist., Coal Meas. [Sig. full of veins.]

*RUSICHNITES carbonarius*, Dawson, 1868, Acadian Geology, Carboniferous. [Sig. pertaining to Carbon.]

*grenvillensis*, Dawson, Chazy Gr. [Ety. proper name.]

*SOLENOPLEURA nana*, Ford, 1878, Am. Jour. Sci. and Arts, 3d ser., vol. 15, Potsdam Gr. [Sig. a dwarf.]

*SPATHIOCARIS*, Clarke, 1882, Am. Jour. Sci. and Arts, 3d ser., vol. 23. [Ety. *spathe*, a spathe; *karis*, a shrimp.]

*emersoni*, Clarke, 1882, Am. Jour. Sci. and Arts, 3d ser., vol. 23, Portage Gr. [Ety. proper name.]

*lutheri* instead of *Lisgocaris lutheri*.

*TRIARTHURUS becki* is from the Utica Slate Gr.

*fischeri*, Billings, 1865, Pal. Foss., Quebec Gr. [Ety. proper name.]

*glaber*, Billings, 1859, Can. Nat. and Geol., vol. 4, Utica Slate Gr. [Sig. smooth.]

*spinus* is from the Utica Slate Gr.

*trilineatus* should be referred to *Atops trilineatus*.

*TRINUCLEUS bellulus*, Ulrich, 1878, Jour. Cin. Soc. Nat. Hist., vol. 1, is from the Utica Slate, and seems to be the young of *T. concentricus*.

## CLASS ARACHNIDA.

*EOSCORPIUS* was published in vol. 46, Am. Jour. Sci. and Arts.

## CLASS MYRIAPODA.

*EUPHOBERIA* was published in vol. 46, Am. Jour. Sci. and Arts.

## CLASS INSECTA.

*ARCHIMYLACRIS mantis* is a typographical or accidental mistake, and the name should be stricken out.

*EPHEMERITES primordialis*, Scudder, 1878, Proc. Bost. Soc. Nat. Hist., Coal Meas. [Sig. primordial.]

*TERMES*, Linnaeus, 1748, Systema Naturae, p. 610, and older authors. [Ety. *termes*, a worm that eats wood.]

*contusus*, Scudder, 1878, Proc. Bost. Soc. Nat. Hist., Coal Meas. [Sig. broken or bruised.]

## CLASS PISCES.

*ACONDYLACANTHUS* (?) *mudgianus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Up. Coal Meas. [Ety. proper name.]

*nuperus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Up. Coal Meas. [Sig. new.]

*ACONDYLACANTHUS rectus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Up. Coal Meas. [Sig. straight.]

*xiphias*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Keokuk Gr. [Sig. a sword fish.]

*AMACANTHUS* can not be derived from *ana-*



- kanthos*, and its etymology is not apparent unless it is from *ama*, together; and *kanthos*, the felly of a wheel.
- ASTEROPTYCHIUS** *tenellus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Up. Coal Meas. [Sig. young, delicate.]
- BATACANTHUS** (?) *nevis*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Keokuk Gr. [Sig. death.]
- Catopterus macrurus* is from the Triassic, and the specific name signifies long tailed.
- CHITONODUS**, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7. [Ety. *chiton*, a smock or coat; *odous*, a tooth.]
- antiquus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Low. Burlington Gr. [Sig. ancient.]
- latus*, Leidy, 1856 (*Cochliodus latus*), Trans. Am. Phil. Soc., vol. 11, p. 87, Pl. 5, fig. 17, Keokuk Gr. [Sig. wide.]
- liratus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Sig. furrowed.]
- rugosus* instead of *Poecilodus rugosus*, *P. ornatus* and *P. convolutus*.
- springeri*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Up. Burlington Gr. [Ety. proper name.]
- tribulis*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Keokuk Gr. [Sig. one of the same tribe.]
- CLADODUS** *occidentalis*, Leidy, 1859, Proc. Acad. Nat. Sci., Up. Coal Meas. [Sig. western.]
- COCHLIODUS** is derived from *kochlias*, anything spiral; *odous*, a tooth.
- crassus*, Newberry & Worthen, is a syn. for *Sandalodus lævissimus*.
- latus*, refer to *Chitonodus latus*.
- nitidus*, Leidy, 1856, refer to *Deltodotychi* *nitidus*.
- nobilis*, Newberry & Worthen, syn. for *Chitonodus latus*.
- obliquus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Sig. oblique.]
- occidentalis*, Leidy, 1856, refer to *Deltodus occidentalis*.
- validus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Kaskaskia Gr. [Sig. strong, stout.]
- vanhornii*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Ety. proper name.]
- COPODUS** *pusillus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Kaskaskia Gr. [Sig. very small.]
- vanhornii*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Ety. proper name.]
- CTENACANTHUS** *butteri*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7. [Ety. proper name.]
- cannaliratus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Kaskaskia Gr. [Sig. reed furrowed.]
- CTENACANTHUS** *costatus*, refer to *Eunemacanthus costatus*.
- coxanus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Keokuk Gr. [Ety. proper name.]
- deflexus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Sig. deflexed.]
- harrisoni*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Ety. proper name.]
- pellensis*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Ety. proper name.]
- CTENODUS** *dialophus*, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. through the neck.]
- fossatus*, Cope, 1877, Proc. Am. Phil. Soc., Permian. [Sig. dug out.]
- gurleianus*, Cope, 1877, Proc. Am. Phil. Soc., Permian. [Ety. proper name.]
- periprion*, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. a round saw.]
- porrectus*, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. prolonged.]
- pusillus*, Cope, 1877, Pal. Bull. No. 26, Permian. [Sig. very small.]
- CTENOPTYCHIUS** *digitatus*, Leidy, 1856, Trans. Am. Phil. Soc., vol. 11, St. Louis Gr. [Sig. digitated.]
- semicircularis*, refer to *Peripristis semicircularis*.
- DELTODOPSIS**, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7. [Ety. from the resemblance to the genus *Deltodus*.]
- affinis*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Warsaw Gr. [Sig. near to.]
- angusta*, Newberry & Worthen, instead of *Deltodus angustus*.
- bialveata*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Up. Burlington Gr. [Sig. twice hollowed out.]
- convexa*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Up. Burlington and Keokuk Gr. [Sig. convex.]
- convoluta*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Up. Burlington Gr. [Sig. convoluted.]
- exornata*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Warsaw Gr. [Sig. adorned.]
- keokuk*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Keokuk Gr. [Ety. proper name.]
- stludovici*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Ety. proper name.]
- DELTODUS** *alatus*, Newberry & Worthen, syn. for *Chitonodus latus*.
- angularis*, Newberry & Worthen, syn. for *Orthopleurodus carbonarius*.
- angustus*, refer to *Deltodopsis angusta*.

- DELTODUS cinctulus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Warsaw Gr. [Sig. small girt.]  
*fasciatus*, refer to *Teniodus fasciatus*.  
*intermedius*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Sig. intermediate.]  
*latus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Keokuk Gr. [Sig. to be concealed.]  
*occidentalis*, Leidy, 1856 (Cochliodus occidentalis), Trans. Am. Phil. Soc. vol. 11, Warsaw and Keokuk Gr. [Sig. western.]  
*parvus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Sig. small.]  
*powelli*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Up. Carb. [Ety. proper name.]  
*propinquus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Coal Meas. [Sig. near.]  
*rhomboides*, Newberry & Worthen, is a syn. for *Sandalodus spatulatus*.  
*stellatus*, Newberry & Worthen, syn. for *D. occidentalis*.  
*trilobus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Warsaw Gr. [Sig. three lobed.]
- DELTOPTYCHUS expansus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Sig. expanded.]  
*nitidus*, Leidy, 1856 (Cochliodus nitidus), Trans. Am. Phil. Soc., vol. 11, Kaskaskia Gr. [Sig. neat.]  
*primus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Up. Burlington Gr. [Sig. first.]  
*varsoviensis*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Warsaw Gr. [Ety. proper name.]  
*wachsmuthi*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Keokuk Gr. [Ety. proper name.]
- DIPLODUS penetrans* is from the Can. Nat. & Geol., vol. 5.
- ECTOSTEORHACHIS*, Cope, 1880, Pal. Bull. No. 32. [Ety. *ektos*, without; *rachis*, a ridge.]  
*nitidus*, Cope, 1880, Pal. Bull. No. 32, Permian. [Sig. neat.]
- EUNEMACANTHUS*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7. [Ety. *eu*, well; *nema*, a line; *akantha*, a spine.]  
*costatus*, Newberry & Worthen, instead of *Ctenacanthus costatus*.
- GLYMMATACANTHUS petrodoides*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Kaskaskia Gr. [Sig. like *Petrodus*.]  
*rudis*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Keokuk Gr. [Sig. a slender stick.]
- GYRACANTHUS cordatus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Keokuk Gr. [Sig. judicious.]
- HELODUS consolidatus*, Newberry & Worthen, syn. for *Chitonodus laevis*.  
*gibbus*, Leidy, 1856, Trans. Am. Phil. Soc., vol. 11, Keokuk Gr. [Sig. gibbous.]  
*placenta*, refer to *Psephodus placenta*.
- JANASSA*, Münster, 1839, Beiträge zur Petrefaktenkunde, vol. 1, and in Ag. Poiss. Foss., vol. 3, p. 375. [Ety. mythological name.]  
*gurleiana*, Cope, 1877 (Strigilina gurleiana), Proc. Am. Phil. Soc., Permian. [Ety. proper name.]
- LEPTOPHRACTUS* was accidentally printed in this class, but it also appeared correctly among the Reptilia.
- ORACANTHUS consimilis*, St. John & Worthen, syn. for *O. vetustus*.  
*rectus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Kaskaskia Gr. [Sig. straight.]  
*vetustus*, Leidy, 1856, Jour. Acad. Nat. Sci., Coal Meas. [Sig. ancient.]
- ORTHACANTHUS quadriseriatus*, Cope, 1877, Pal. Bull., No. 26, Permian. [Sig. having four series.]
- ORTHOPLEROODUS*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7. [Ety. *orthos*, straight; *pleura*, side; *odous*, a tooth.]  
*carbonarius*, Newberry & Worthen, instead of *Sandalodus carbonarius*.  
*convexus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Coal Meas. [Sig. convex.]  
*novomexicanus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Low. Carb. [Ety. proper name.]
- PALAEOBATIS*, Leidy, 1856, Trans. Am. Phil. Soc., vol. 11. [Ety. *palaio*, ancient; *batis*, a prickly kind of roach or ray.]  
*insignis*, Leidy, 1856, Trans. Am. Phil. Soc., vol. 11, Keokuk Gr. [Sig. marked.]
- PALAEONISCUS alberti*, refer to *Rhadinichthys alberti*.  
*cairnsi*, refer to *Rhadinichthys cairnsi*.  
*jacksoni*, Dawson, 1877, Can. Nat. Quar. Jour. Sci., vol. 8, Carboniferous. [Ety. proper name.]  
*modulus*, see *Rhadinichthys modulus*.
- PERIPRISTIS* Agassiz, 1870, Proc. Am. Phil. Soc., vol. 11. [Ety. *peri*, around; *pristis*, a saw.]  
*semicircularis*, Newberry & Worthen, 1866 (Ctenoptichus semicircularis), Geo. of Ill., vol. 2, Coal Meas. [Sig. semicircular.]
- PETALODUS destructor* is a syn. for *P. alleganiensis*.
- PETALORHYNCHUS* being neuter the specific names should be made to correspond.
- PHYSONEMUS falcatus*, St. John & Worthen (In press), Geo. Sur., Ill., vol. 7, St. Louis Gr. [Sig. scythe shaped.]
- PNIGEACANTHUS trigona*'is, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Sig. trigonal.]

- PÆCILODUS carbonarius*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Coal Meas. [Sig. pertaining to coal.]
- cestriensis*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Kaskaskia Gr. [Ety. proper name.]
- convolutus*, Newberry & Worthen, is a syn. for *Chitonodus rugosus*.
- ornatus*, Newberry & Worthen, syn. for *Chitonodus rugosus*.
- springeri*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Low. Carb. [Ety. proper name.]
- stludovici*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Ety. proper name.]
- varsoviensis*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Warsaw Gr. [Ety. proper name.]
- wortheni*, St. John (In press), Geo. Sur. Ill., vol. 7, Kaskaskia Gr. [Ety. proper name.]
- PSAMMODUS cælatus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Sig. sculptured.]
- crassidens*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Sig. thick tooth.]
- glyptus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Up. Burlington Gr. [Sig. sculptured.]
- grandis*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Keokuk Gr. [Sig. large.]
- lovanus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Burlington Gr. [Ety. proper name.]
- plenus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Sig. large.]
- rhomboideus*, Newberry & Worthen, syn. for *Sandalodus lævissimus*.
- semicylindricus*, Newberry & Worthen, syn. for *Sandalodus lævissimus*.
- springeri*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Up. Burlington Gr. [Ety. proper name.]
- tumidus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Up. Burlington Gr. [Sig. tumid.]
- turgidus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Keokuk Gr. [Sig. inflated.]
- PSEPHODUS latus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Sig. wide.]
- lunulatus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Kaskaskia Gr. [Sig. resembling a small crescent.]
- obliquus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Kinderhook Gr. [Sig. oblique.]
- placenta*, Newberry & Worthen, instead of *Helodus placenta*.
- symmetricus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Kinderhook Gr. [Sig. symmetrical.]
- PTERICHTHYS canadensis*, Whiteaves, 1880, Am. Jour. Sci. & Arts, 3d ser., vol. 20, Devonian. [Ety. proper name.]
- PTERICHTHYS norwoodensis* is a syn. for *Macropetalichthys rapheidolabis*.
- PTYONODUS*, Cope, 1877, Proc. Am. Phil. Soc. [Ety. *ptyon*, a fan; *odous*, a tooth.]
- paucicristatus*, Cope, 1877, Proc. Am. Phil. Soc., Permian. [Sig. few crested.]
- vinslovi*, Cope, 1876, Proc. Acad. Nat. Sci. Phil., Permian. [Ety. proper name.]
- RHADINICHTHYS*, Traquair, 1877, Quar. Jour. Geo. Soc. Lond., vol. 33, p. 548. [Ety. *rhadinus*, slender; *ichthys*, a fish.]
- alberti* instead of *Palaeoniscus alberti*.
- cairnsi* instead of *Palaeoniscus cairnsi*.
- modulus*, Dawson, 1877 (*Palaeoniscus modulus*), Can. Nat. and Quar. Jour. Sci., vol. 8, Carboniferous. [Sig. a small measure.]
- RHYNCHODUS excavatus*, Newberry, 1877, Geo. of Wis., Ham. Gr. [Sig. excavated.]
- SANDALODUS complanatus*, Newberry & Worthen, instead of *Deltodus complanatus*.
- crassus*, Newberry & Worthen, is a syn. for *S. spatulatus*.
- grandis*, Newberry & Worthen, is a syn. for *S. laevissimus*.
- Sicarius extinctus*, Leidy, 1855, Proc. Acad. Nat. Sci., vol. 7, not satisfactorily defined.
- STENACANTHUS nitidus* was defined in 1856, in the Jour. Acad. Nat. Sci., vol. 3, and is from the Catskill Gr.
- STENOPTERODUS*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7. [Ety. *stenos*, narrow; *pteron*, a wing; *odous*, tooth.]
- e'ongatus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Warsaw Gr. [Sig. elongated.]
- parvulus* instead of *Sandalodus parvulus*.
- planus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Up. Burlington Gr. [Sig. flat.]
- Strigilina gurleiana*, refer to *Janassa gurleiana*.
- TÆNIODUS*, DeKoninek, MSS., and in press in Geo. Sur. Ill., vol. 7. [Ety. *tænia*, a ribbon; *odous*, a tooth.]
- fasciatus* instead of *Deltodus fasciatus*.
- obliquus*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Kaskaskia Gr. [Sig. oblique.]
- regularis*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Warsaw Gr. [Sig. regular.]
- TOMODUS limitaris*, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Up. Burlington Gr. [Sig. that is on the border.]
- TRIGONODUS major*, Newberry & Worthen, is a syn. for *Sandalodus complanatus*.

- VATICINODUS, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7. [Ety. *vaticinus*, prophetic; *odous*, a tooth.]  
 carbonarius, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Coal Meas. [Sig. pertaining to coal.]  
 discrepans, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Up. Burlington Gr. [Sig. varying.]  
 lepis, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Up. Coal Meas. [Sig. a scale.]  
 similis, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Kaskaskia Gr. [Sig. similar.]  
 simplex, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Sig. simple.]  
 vetustus, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Kinderhook Gr. [Sig. ancient.]  
 XYSTRODUS and X. occidentalis were defined in 1870, in Proc. Am. Phil. Soc., vol. 11.  
 bellulus, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Coal Meas. [Sig. elegant.]  
 imitatus, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, St. Louis Gr. [Sig. imitating.]  
 inconditus, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Keokuk Gr. [Sig. irregular.]  
 simplex, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Up. Burlington Gr. [Sig. simple.]  
 verus, St. John & Worthen (In press), Geo. Sur. Ill., vol. 7, Kaskaskia Gr. [Sig. genuine.]

## CLASS REPTILIA.

- ACHELONA, Cope, 1882, Pal. Bull. No. 35. [Ety. *achos*, trouble; *loma*, the border.]  
 cumminsi, Cope, 1882, Pal. Bull. No. 35. Permian. [Ety. proper name.]  
 ANISODEXIS, Cope, 1882, Pal. Bull. No. 35. [Ety. *anisos*, unequal; *dexios*, on the right.]  
 imbricarius, Cope, 1882, Pal. Bull. No. 35, Permian. [Sig. having imbrications.]  
 ARCHÆOBELUS, Cope, 1877, Proc. Am. Phil. Soc. [Ety. *archaios*, ancient; *belos*, the house itself.]  
 vellicatus, Cope, 1877, Proc. Am. Phil. Soc., Permian. [Sig. vellicated.]  
 BAPHETES and B. planiceps were defined in Jour. Geo. Soc. Lond., vol. 10.  
 BOLOSAURUS, Cope, 1878, Pal. Bull. No. 29. [Ety. *bolos*, the casting of teeth; *sauros*, a sea fish.]  
 rapidens, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. rapid.]  
 striatus, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. striated.]  
 CLEPSYDROPS, Cope, 1876, Proc. Acad. Nat. Sci. [Ety. *klepsydra*, an hour glass; *ops*, view.]  
 colletti, Cope, 1876, Proc. Acad. Nat. Sci., Permian. [Ety. proper name.]  
 gigas refer to Dimetrodon gigas.  
 limbatus, Cope, 1877, Proc. Am. Phil. Soc., Permian. [Sig. bordered.]  
 natalis, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. natal.]  
 pedunculatus, Cope, 1876, Proc. Acad. Nat. Sci., Permian. [Sig. pedunculated.]  
 vinslovi, Cope, 1877, Proc. Am. Phil. Soc., Permian. [Ety. proper name.]  
 CLEPSYSAURUS pennsylvanicus is from the Triassic.  
 CRICOTUS, Cope, 1876, Proc. Acad. Nat. Sci. [Ety. *krikotos*, ringed.]  
 discophorus, Cope, 1877, Pal. Bull. No. 26, Permian. [Sig. a dish bearer.]  
 gibsoni, Cope, 1877, Pal. Bull. No. 26, Permian. [Ety. proper name.]  
 heteroclitus, Cope, 1876, Proc. Acad. Nat. Sci., Permian. [Sig. anomalous.]  
 DENDRERPETON obtusum, Cope, 1868, Proc. Acad. Nat. Sci., Coal Meas. [Sig. obtuse.]  
 DIAECTES, Cope, 1878, Pal. Bull. No. 29. [Ety. *dia*, through; *dektes*, a biter.]  
*latibuccatus*, see Empedocles latibuccatus.  
*molaris*, see Empedocles molaris.  
 phaseolus, Cope, 1880, Pal. Bull. No. 32, Permian. [Sig. resembling a bean.]  
 sideropellicus, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. having great strength.]  
 DIMETRODON, Cope, 1878, Pal. Bull. No. 29. [Ety. *dimetros*, of two measures; *odous*, tooth.]  
 cruciger, Cope, 1878, Am. Nat., Permian. [Sig. cross bearer.]  
 gigas, Cope, 1878 (Clepsydrops gigas), Am. Nat., Permian. [Sig. large.]  
 incisivus, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. having the quality of cutting or biting.]  
 rectiformis, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. straight formed.]  
 semiradicatus, Cope, 1881, Bull. U. S. Geo. Sur. Terr., vol. 6, No. 1, Permian. [Sig. half radicated.]  
 DIPLOCAULUS, Cope, 1877, Pal. Bull. No. 26. [Ety. *diploos*, double; *kaulos*, shaft.]

- DIPLOCAULUS magnicornis**, Cope, 1882, Pal. Bull. No. 35, Permian. [Sig. large horned.]
- salamandroides**, Cope, 1877, Pal. Bull. No. 26, Permian. [Sig. like a salamander.]
- ECTOCYNODON**, Cope, 1878, Pal. Bull. No. 29. [Ety. *ektos*, far from; *kunos*, dog; *odous*, tooth.]
- aguti**, Cope, 1882, Pal. Bull. No. 35, Permian. [Ety. proper name.]
- ordinatus**, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. ordinated.]
- EDAPHOSAURUS**, Cope, 1882, Pal. Bull. No. 35. [Ety. *edaphos*, a foundation; *sauros*, a sea fish.]
- pogonias**, Cope, 1882, Pal. Bull. No. 35, Permian. [Sig. bearded.]
- EMBOLOPHORUS**, Cope, 1878, Pal. Bull. No. 29. [Ety. *embolos*, anything running to a point; *phoros*, bearing.]
- fritillus**, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. a dice box.]
- EMPEDOCLES**, Cope, 1878, Pal. Bull. No. 29. [Ety. proper name.]
- alatus**, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. winged.]
- molaris**, Cope, 1880, Pal. Bull., No. 32, Permian. [Sig. a grinder.]
- latibuccatus**, Cope, 1878 (Diadectes latibuccatus), Pal. Bull. No. 29, Permian. [Sig. side cheeked.]
- EPICORDYLUS**, Cope, 1878, Pal. Bull. No. 29. [Ety. *epi*, upon; *kordylos*, a water lizard.]
- erythroliticus**, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. red stone.]
- ERYOPS**, Cope, 1877, Proc. Am. Phil. Soc. [Ety. *eryos*, a shoot; *ope*, view.]
- megacephalus**, Cope, 1877, Proc. Am. Phil. Soc., Permian. [Sig. large headed.]
- reticulatus**, Cope, 1881, Am. Naturalist, p. 1020, Permian. [Sig. reticulated.]
- HELODECTES**, Cope, 1880, Pal. Bull. No. 32. [Ety. *helos*, a nail; *dectes*, a biter.]
- isaaci**, Cope, 1880, Pal. Bull. No. 32, Permian. [Ety. proper name.]
- paridens**, Cope, 1880, Pal. Bull. No. 32, Permian. [Sig. equal toothed.]
- HYLONOMUS wymani** instead of *H. hymani*.
- ICHTHYCANTHUS**, Cope, 1877, Pal. Bull. No. 24, and Proc. Am. Phil. Soc. [Ety. *ichthys*, a fish; *kanthos*, the corner of the eye.]
- ohioensis**, Cope, 1877, Proc. Am. Phil. Soc., Coal Meas. [Ety. proper name.]
- platypus**, Cope, 1877, Proc. Am. Phil. Soc., Coal Meas. [Ety. broad footed.]
- LEPTOPHRACUS lineolatus**, Cope, 1877, Proc. Am. Phil. Soc., Coal Meas. [Sig. fine lined.]
- LYSOROPHUS**, Cope, 1877, Pal. Bull. No. 26. [Ety. *lysis*, setting free; *rophos*, supped up.]
- tricarinatus**, Cope, 1877, Pal. Bull. No. 26, Permian. [Sig. three carinated.]
- METARMOSAURUS**, Cope, 1878, Pal. Bull. No. 29, p. 516.
- fossatus**, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. dug. out.]
- OPHIACODON**, Marsh, 1878, Am. Jour. Sci. and Arts, 3d. ser., vol. 15. [Ety. *ophiakos*, belonging to serpents; *odous*, tooth.]
- grandis**, Marsh, 1878, Am. Jour. Sci. and Arts, 3d. ser., vol. 15, Permian. [Sig. grand.]
- mirus**, Marsh, 1878, Am. Jour. Sci. and Arts, 3d. ser., vol. 15, Permian. [Sig. wonderful.]
- PANTYLUS**, Cope, 1881, Bull. U. S. Geo. Sur. Terr. vol. 6, No. 1. [Ety. *pan*, all; *tylos* a knob.]
- cordatus**, Cope, 1881, Bull. U. S. Geo. Sur. Terr. vol. 6, No. 1, Permian. [Sig. cordated.]
- PARIOTICHUS**, Cope, 1878, Pal. Bull. No. 29. [Ety. *parios*, parian; *tychos*, a hammer.]
- brachyops**, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. short sighted.]
- PARIOXYS**, Cope, 1878, Pal. Bull. No. 29. [Ety. *para*, beside; *oxys*, sharp.]
- ferriculus**, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. iron distaff.]
- RHACHITOMUS**, Cope, 1878, Pal. Bull. No. 29. [Ety. *rachis*, a ridge; *tomos*, sharp.]
- valens**, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. vigorous.]
- SAUROPLEURA longipes**, Cope, 1874, Trans. Am. Phil. Soc., vol. 13, Coal Meas. [Sig. long footed.]
- SPHENACODON**, Marsh, 1878, Am. Jour. Sci. and Arts, 3d. ser., vol. 15. [Ety. *sphen*, a wedge; *akis*, a barb; *odous*, tooth.]
- ferox**, Marsh, 1878, Am. Jour. Sci. and Arts, 3d. ser., vol. 15, Permian. [Sig. fierce.]
- THEROPLEURA**, Cope, 1878, Pal. Bull. No. 29. [Ety. *theros*, summer; *pleura*, a rib.]
- obtusidens**, Cope, 1880, Pal. Bull. No. 32, Permian. [Sig. having obtuse teeth.]
- retroversa**, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. turned back.]
- triangulata**, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. triangular.]
- uniformis**, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. uniform.]
- TRIMERORHACHIS**, Cope, 1878, Pal. Bull., No. 29, Permian. [Ety. *trimeres*, tripartite; *rachis*, a ridge.]
- insignis**, Cope, 1878, Pal. Bull. No. 29, Permian. [Sig. marked.]
- TUDITANUS mordax** is a syn. for *Ceraterpeton punctolineatum*.
- tabulatus**, Cope, 1877, Proc. Am. Phil. Soc., Coal Meas. [Sig. tabulated.]
- ZATRACHYS**, Cope, 1878, Pal. Bull. No. 29. [Ety. *za*, an intensive; *trachys*, rough.]
- apicalis**, Cope, 1881, Am. Naturalist, p. 1020, Permian. [Sig. apical.]
- serratus**, Cope, 1878, Pal. Bull., No. 29, Permian. [Sig. serrated.]

## OMISSION.

POTERIOCRINUS NETTLEROTHANUS, S. A. Miller, 1882, Jour. Cin. Soc. Nat. Hist., vol. 5, Up. Held. Gr. [Ety. proper name.]

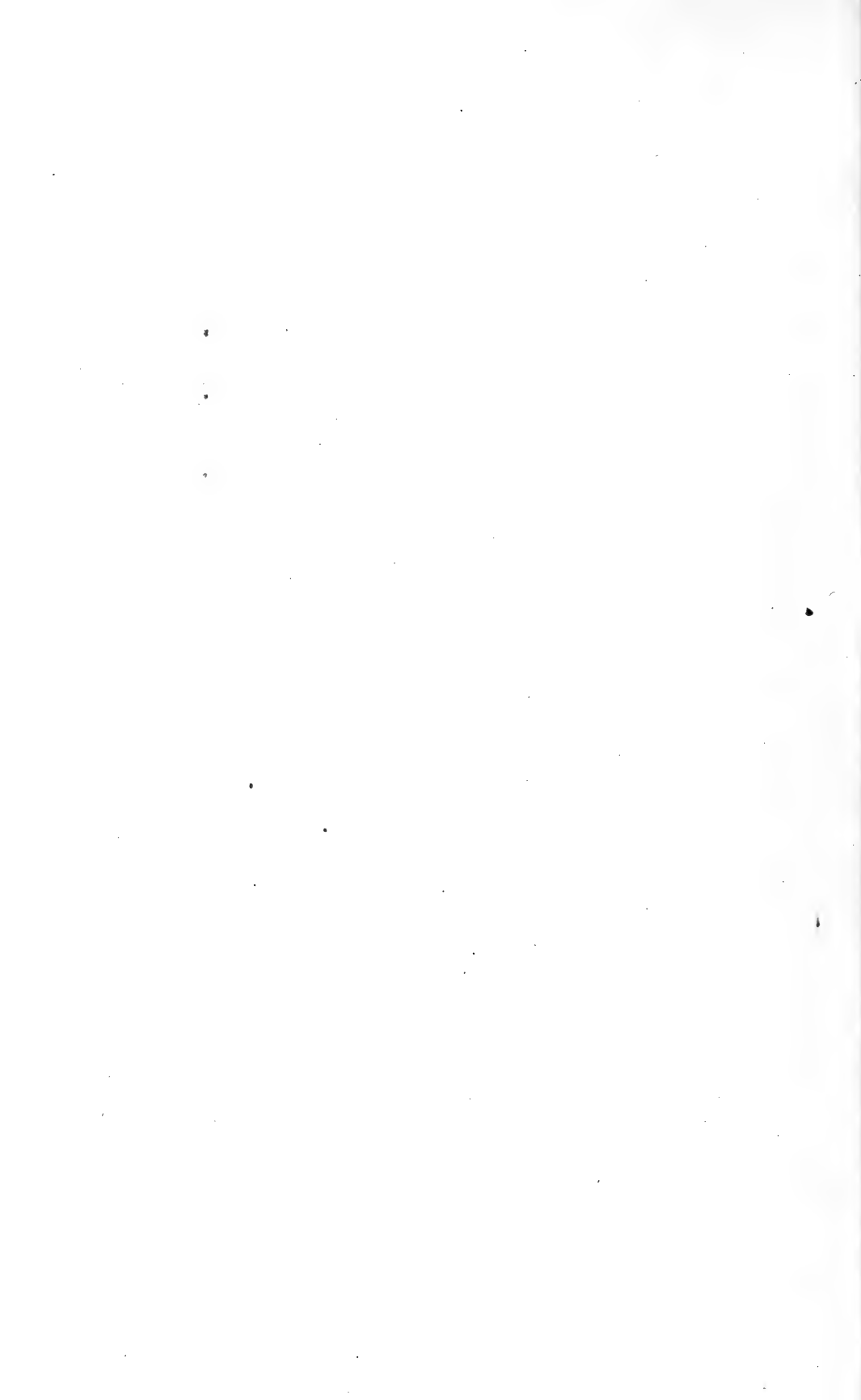
---

### —NOTE.—

The author has been informed that Mr. J. M. Clarke has described a new genus and three new species of Phillocaridæ, which will probably appear in the Am. Jour. Sci. & Arts, for February, 1883, viz: *Dipterocaris pescervæ*, *D. pennidædali*, and *D. procne*—all from the Chemung.

• Prof. E. W. Claypole says there is little or no classic ground for printing *æ* in the beginning of the second part of a compound word, such as *rugæstriatus*. It should be *rugistriatus*. An exception occurs when the first part of the word is merely a prefix, as in *subæqualis*. That *nebraskensis* should be written instead of *nebrascensis*, as there is no ground for using the *c* instead of *k*. And that the generic name *Chariocephalus* should be written *Charitocephalus*.

Mr. Henry Nettleroth has described, under the title of "Fossil Mollusca of Kentucky," for vol. 1 of that State, which is now in press, *Aviculopecten cancellatus*, *A. concentricus*, *Paracyclas octerlonyi*, *Tellinomya striata*, *Modiomorpha charlestownensis*, *Millerella* (n. gen.) *jonesi*, *Spirifera euruteines*, var. *erecta*, *S. euruteines*, var. *elongata*, *S. bynesi*, *S. hobbsi*, *S. davisi*, *S. meconathyi*, *Rhynchonella gainesi*, *Eumorphalus protteri*, *Cyclonema clarki*, *Cyrtoceras hydraulicum*, *Murchisonia tuberculata*, *Platyceras nodulosum*, *P. elongatum*, *P. compressum*, and *Orthis goodwini*, from the Devonian formation; and *Spirifera knotti*, *Pentamerella schwartzi*, *Rhynchonella compressa*, *Pentamerus foggi*, *P. trigonalis*, *P. louisvillensis*, and *Stricklandia louisvillensis*, from the Niagara Group; and *Cypriocardites halli*, from the Hudson River Group.





# INDEX OF GENERA.

In addition to indexing the Genera in the whole work, the gender of each genus is designated—*m*, for masculine; *f*, feminine; *n*, neuter.

PAGE.		PAGE.		PAGE.	
Acambona, <i>f</i> .....	103	Amplexus, <i>m</i> ....	46, 243, 262	Archimylacris, <i>f</i> ....	225, 319
Acanthaspis, <i>f</i> .....	227	Ampullaria.....	143	Architarbus, <i>n</i> .....	224
Acanthocladia, <i>f</i> .....	289	Ampyx, <i>m</i> .....	209	Archilulus, <i>m</i> .....	224
Acanthograptus, <i>m</i> ....	262	Amygdalocystites, <i>m</i> ..	70, 279	Arctinurus.....	316
Acantholepis, <i>f</i> .....	227	Anaclitacanthus, <i>m</i> ....	228	Arenicolites, <i>m</i> .....	206
Acantholoma.....	208	Anarthrocanna, <i>f</i> .....	22	Arges, <i>m</i> .....	210, 316
Acanthophyton, <i>n</i> .....	21	Anastrophia, <i>f</i> .....	104, 294	Arionellus, <i>m</i> .....	210, 316
Acanthotelson, <i>n</i> .....	208	Anatina, <i>f</i> .....	181, 309	Aristophycus.....	248
Acervularia, <i>f</i> .....	46, 262	Ancyrocrinus, <i>m</i> .....	70	Arthraria, <i>f</i> .....	22
Acheloma, <i>n</i> .....	323	Aneimites, <i>m</i> .....	22	Arthroclema, <i>n</i> .....	95, 289
Acidaspis, <i>f</i> .....	208, 316	Angellum, <i>n</i> .....	309	Arthrolycosa, <i>f</i> .....	224
<i>Achis</i> .....	143, 300	Anisodexis, <i>m</i> .....	323	Arthronema, <i>m</i> .....	289
Aclisina, <i>f</i> .....	300	Anisophyllum, <i>n</i> ....	262	Arthropycus, <i>n</i> .....	23
Acondylacanthus, <i>m</i>	227, 319	Annularia, <i>f</i> .....	22, 248	Arthrostigma, <i>n</i> .....	23
Acrocrinus, <i>m</i> .....	66-279	Anodontopsis, <i>f</i> ....	182	Artisia, <i>f</i> .....	23
<i>Acroculia</i> .....	143	Anomalocrinus, <i>m</i> ....	70, 279	<i>Asaphiscus</i> .....	210
Acrolepis, <i>f</i> .....	227	Anomalocystites, <i>m</i>	70, 279	Asaphoidichnus, <i>m</i> ....	316
Acrophyllum, <i>n</i> ....	46, 262	Anomalodonta, <i>f</i> .....	182	Asaphus, <i>m</i> .....	210, 316
Acrotreta, <i>f</i> .....	103	<i>Anomaloides</i> .....	280	Ascoceras, <i>n</i> .....	165
Actinoceras, <i>n</i> .....	165, 305	<i>Anomia</i> .....	104	Ascodictyon, <i>n</i> .....	289
Actinocrinus, <i>m</i> ....	66, 279	<i>Anomites</i> .....	104	<i>Asolanus</i> .....	248
Actinodesma, <i>n</i> .....	180, 309	Anomphalus, <i>m</i> .....	143	Aspidella, <i>f</i> .....	141
<i>Aegilops</i> .....	103, 294	Anopolenus, <i>m</i> .....	209	Aspidichthys, <i>m</i> .....	228
<i>Agaricia</i> .....	46	Antholithes, <i>m</i> ....	22, 248	Aspidoerinus, <i>m</i> .....	71
Agaricocrinus, <i>m</i> ....	69, 279	Anthophyllum, <i>n</i> ....	46	Aspidodus, <i>m</i> .....	228
<i>Agassichthys</i> .....	227	Anthracerpes, <i>m</i> ....	224	Asplenites, <i>m</i> .....	23
Agassizocrinus, <i>m</i> ....	69, 279	Anthracomya, <i>f</i> ....	182	Astarte, <i>f</i> .....	182
Agassizodus, <i>m</i> .....	228	Anthraconectes, <i>m</i> ....	209	Astartella, <i>f</i> .....	182, 309
Agelacrinus, <i>m</i> .....	69, 279	Anthraco palemon, <i>m</i> ..	210	Asteracanthus, <i>m</i> .....	228
Agiaspis, <i>f</i> .....	209, 316	Anthracopectera, <i>f</i> ...	182, 309	<i>Asterias</i> .....	71
Agnostus, <i>m</i> .....	209, 316	Anthracopupa, <i>f</i> .....	300	Asterocarpus, <i>m</i> .....	23
Agraulos, <i>m</i> .....	209, 316	Anthracosia, <i>f</i> .....	182	<i>Asterocrinus</i> .....	71
<i>Alecto</i> .....	95, 289	Antliodus, <i>m</i> .....	228	Asterophycus, <i>n</i> ....	23, 248
Alethopteris, <i>f</i> .....	21, 248	Apedodus, <i>m</i> .....	228	Asterophyllites, <i>m</i> ....	23, 248
Allagecrinus, <i>m</i> .....	279	Aphlebia, <i>f</i> .....	248	Asteropteris, <i>f</i> .....	248
Alloprosallocrinus, <i>m</i>	70, 279	Apiocystites, <i>m</i> .....	70	Asteroptychius, <i>m</i> ..	228, 320
Allorisma, <i>n</i> .....	180, 309	Arabellites, <i>m</i> .....	313	Asterosteus, <i>m</i> .....	228
Alveolites, <i>m</i> .....	46, 262	Arachnocrinus, <i>m</i> ....	280	<i>Astraea</i> .....	46, 262
Amacanthus, <i>m</i> ....	228, 319	Arachnophyllum, <i>n</i> ..	262	Astraephyllum, <i>n</i> ....	262
Amblypterus, <i>m</i> .....	228	Araucarites, <i>m</i> .....	22	Astraespongia, <i>f</i> .....	42
Ambocoelia, <i>f</i> .....	103	<i>Arca</i> .....	182, 309	<i>Astrios</i> .....	71
Ambonychia, <i>f</i> ....	181, 309	Archaeobelus, <i>m</i> ....	323	Astrocerium, <i>n</i> .....	47
<i>Ammonites</i> .....	305	Archaeocaris, <i>f</i> .....	210	Astroconia, <i>n</i> .....	260
Ampheristocrinus, <i>m</i> ..	279	Archaeocidarid, <i>f</i> ....	70, 280	<i>Astrocrinites</i> .....	71
Amphibamus, <i>m</i> .....	240	Archaeocrinus, <i>m</i> ....	280	Ateleospongia, <i>f</i> ....	42, 260
Amphicoelia, <i>f</i> .....	181	Archaeopteris, <i>f</i> ....	22, 248	Atactopora, <i>f</i> .....	289
Amphigenia, <i>f</i> .....	104	Archegogryllus, <i>m</i> ....	225	<i>Ataxocrinus</i> .....	71
Amphion, <i>m</i> .....	209	Archaeocyathellus, <i>m</i> ..	260	Atelocystites, <i>m</i> .....	71
Amphipeltis, <i>f</i> .....	209, 316	Archaeocyathus, <i>m</i> ....	42	Athyris, <i>f</i> .....	104, 294
Amphoracrinus, <i>m</i> ....	70, 279	Archimedes, <i>m</i> .....	95	Atops, <i>f</i> .....	211, 316
Amplexopora, <i>f</i> .....	289	<i>Archimediopora</i> .....	95	Atrypa, <i>f</i> .....	105, 294

	PAGE.		PAGE.		PAGE.
Aulacophyllum, <i>n</i> .....	262	Calamophycus, <i>n</i> .....	249	Cheirodus, <i>m</i> .....	229
Aulocopina, <i>f</i> .....	42	Calamopora.....	47, 263	Cheirotherium, <i>n</i> .....	240
Aulophyllum, <i>n</i> .....	47	Calamostachys, <i>m</i> .....	249	Cheirurus.....	214
Aulopora, <i>f</i> .....	47, 64, 263	Calapcecia, <i>f</i> .....	47	Chemnitzia, <i>f</i> .....	146, 301
Aulosteges, <i>m</i> .....	106	Calathium, <i>n</i> .....	43	Chiton, <i>m</i> .....	141, 301
Avicula, <i>f</i> .....	182, 309	Calathocrinus.....	72	Chitonodus, <i>m</i> .....	320
Aviculopecten, <i>m</i> .....	184, 310	Calcarina, <i>f</i> .....	260	Chloephycus.....	250
Aviculopinna, <i>f</i> .....	185	Calceocrinus, <i>m</i> .....	72, 280	Cholodus, <i>m</i> .....	229
Axinura.....	47	Calceola, <i>f</i> .....	107, 263, 295	Chomatodus, <i>m</i> .....	229
Axinus.....	185	Calcisphaera, <i>f</i> .....	260	Chondrites, <i>m</i> .....	25, 250
Axophyllum, <i>n</i> .....	47, 64	Calclipteridium, <i>n</i> .....	249	Chonetes, <i>m</i> .....	108, 295
Bactrites, <i>m</i> .....	305	Callipteris, <i>f</i> .....	24, 249	Chonograptus, <i>m</i> .....	48, 64
Baiera, <i>f</i> .....	248	Callocestites, <i>m</i> .....	73	Chonophyllum, <i>n</i> .....	48, 64, 264
Bakevella, <i>f</i> .....	185	Callograptus, <i>m</i> .....	47, 263	Chonostegites.....	48, 264
Balanocrinus.....	71	Callonema, <i>n</i> .....	301	Chrestotes, <i>f</i> .....	225
Baphetes, <i>m</i> .....	240, 323	Callopora, <i>f</i> .....	96, 289	Cimitaria, <i>f</i> .....	187
Barrandia.....	211	Calophyllum, <i>n</i> .....	263	Cladodus, <i>m</i> .....	229, 320
Baryerinus, <i>m</i> .....	71, 280	Calopodus, <i>m</i> .....	229	Cladograptus, <i>m</i> .....	49
Baryphyllum, <i>n</i> .....	47, 263	Calymene, <i>f</i> .....	213, 316	Cladopora, <i>f</i> .....	49, 64, 264
Batacanthus, <i>m</i> .....	228, 320	Calypotograptus, <i>m</i> .....	264	Clathrocellia, <i>f</i> .....	299
Bathycheilodus, <i>m</i> .....	229	Camarella, <i>f</i> .....	107, 295	Clathropora, <i>f</i> .....	96, 290
Bathynotus, <i>m</i> .....	211	Camarium, <i>n</i> .....	107	Cleidophorus, <i>m</i> .....	187, 310
Bathyrellus, <i>m</i> .....	211	Camaroceras, <i>n</i> .....	165	Cleioerinus, <i>m</i> .....	73
Bathyrus, <i>m</i> .....	211, 316	Camarophoria, <i>f</i> .....	107, 295	Clepsydrus, <i>f</i> .....	323
Batocrinus, <i>m</i> .....	71, 280	Campanulites.....	73	Clepsysaurus, <i>m</i> .....	240, 323
Batostoma, <i>n</i> .....	289	Campophyllum, <i>n</i> .....	48, 64	Climactichnites, <i>m</i> .....	214
Batostomella, <i>f</i> .....	289	Caninia.....	48	Climacograptus, <i>m</i> .....	49
Beatrice, <i>f</i> .....	165, 260, 305	Cannapora, <i>f</i> .....	48, 264	Climacodus, <i>m</i> .....	230
Bechera, <i>f</i> .....	23	Capulus, <i>m</i> .....	146	Clinopistha, <i>f</i> .....	187
Beinertia, <i>f</i> .....	23	Carabocrinus, <i>m</i> .....	73	Clioderma.....	141
Belemnocrinus, <i>m</i> .....	72, 94, 280	Carbonarca, <i>f</i> .....	185	Clisiophyllum, <i>n</i> .....	49, 265
Belinurus.....	212	Carcharopsis, <i>f</i> .....	229	Clisospira, <i>f</i> .....	146, 301
Bellerophon, <i>m</i> .....	143, 300	Cardinia, <i>f</i> .....	185, 310	Clonopora, <i>f</i> .....	290
Berenicea, <i>f</i> .....	289	Cardiocarpon, <i>n</i> .....	24, 249	Closterocrinus, <i>m</i> .....	73
Bergeria.....	248	Cardiola, <i>f</i> .....	186, 310	Clymenia.....	165
Beyrichia, <i>f</i> .....	212, 316	Cardiomorpha, <i>f</i> .....	186, 310	Cnemidium, <i>n</i> .....	43, 64
Blastoidocrinus, <i>m</i> .....	72	Cardiopsis, <i>f</i> .....	186, 310	Coccocrinus, <i>m</i> .....	73
Blastophycus, <i>n</i> .....	249	Cardiopteris, <i>f</i> .....	249	Coccosteus, <i>m</i> .....	230
Blattina, <i>f</i> .....	225	Cardium, <i>n</i> .....	186, 310	Cochliodus, <i>m</i> .....	230, 320
Blothrophyllum, <i>n</i> .....	47, 263	Carinaropsis, <i>f</i> .....	146	Cocytinus, <i>m</i> .....	240
Blumenbachium.....	42	Carinopora, <i>f</i> .....	96	Codaster, <i>m</i> .....	73, 280
Bolboporites, <i>m</i> .....	47	Carpolithes, <i>m</i> .....	25, 250	Codonites, <i>m</i> .....	74, 280
Bolosaurus, <i>m</i> .....	323	Caryocrinus, <i>m</i> .....	73	Cœlacanthus, <i>m</i> .....	230
Bornia, <i>f</i> .....	249	Caryocystites.....	73	Cœliocrinus, <i>m</i> .....	74, 280
Botrylopora, <i>f</i> .....	96	Caryophyllia.....	264	Cœliocrinus, <i>m</i> .....	74
Brachiocrinus, <i>m</i> .....	72	Catenipora.....	48, 264	Cœlospira, <i>f</i> .....	109
Brachiospongia, <i>f</i> .....	42, 64	Casuarinites.....	250	Coenites.....	265
Brachydectes, <i>m</i> .....	240	Catillocrinus, <i>m</i> .....	73	Coleolus, <i>m</i> .....	299
Brachymerus.....	106	Catopterus.....	229, 320	Coleoprion, <i>m</i> .....	141, 299
Brachyphyllum, <i>n</i> .....	23, 249	Caulerpites, <i>m</i> .....	25, 250	Colletosaurus, <i>m</i> .....	240
Brachyprion.....	107	Caulopteris, <i>f</i> .....	25, 250	Colosteus, <i>m</i> .....	240
Bronquartia.....	212	Caunopora, <i>f</i> .....	48	Colpocaris.....	214
Bronteus, <i>m</i> .....	212, 316	Celluloxylon, <i>n</i> .....	250	Colpoceras, <i>n</i> .....	165, 305
Bruckmannia.....	249	Centrocrinus.....	280	Columnaria, <i>f</i> .....	49, 265
Bucanella, <i>f</i> .....	145	Centronella, <i>f</i> .....	107, 295	Columnopora, <i>f</i> .....	49, 265
Bucania, <i>f</i> .....	145, 300	Cephalaspis, <i>f</i> .....	229	Comarocystites, <i>m</i> .....	74, 281
Bulinella.....	145	Ceramopora, <i>f</i> .....	96, 290	Combophyllum, <i>n</i> .....	49
Bulimorpha, <i>f</i> .....	301	Ceraterpeton, <i>n</i> .....	240	Compsacanthus, <i>n</i> .....	231
Bumastus.....	212	Ceratiocaris, <i>f</i> .....	213, 316	Conchicolites, <i>m</i> .....	206, 313
Bursacrinus, <i>m</i> .....	72	Ceratiocephala.....	213	Conchopterus.....	231
Buthograptus, <i>m</i> .....	47	Ceraurus, <i>m</i> .....	213, 316	Conchodus, <i>m</i> .....	231
Buthotrephis, <i>f</i> .....	23, 249	Cerriopora, <i>f</i> .....	96	Conchopeltis, <i>f</i> .....	146
Bythiacanthus, <i>m</i> .....	229	Chænocardia, <i>f</i> .....	186	Conillites.....	165
Bythopora, <i>f</i> .....	289	Chænomya, <i>f</i> .....	186, 310	Conocardium, <i>n</i> .....	187, 310
Cacabocrinus.....	72	Chætetes, <i>m</i> .....	48, 264	Conocephalites, <i>m</i> .....	214, 316
Calamites, <i>m</i> .....	24, 249	Chariocephalus, <i>m</i> .....	214, 316	Conocephalus.....	214
Calamoclodus, <i>m</i> .....	24	Charionella.....	108	Conoceras, <i>n</i> .....	165
Calamodendron, <i>n</i> .....	24, 249	Cheirocrinus.....	73	Conocoryphe, <i>f</i> .....	214

PAGE.		PAGE.		PAGE.	
<i>Conocrinus</i> .....	74	<i>Cypricardia, f.</i> .....	188, 310	<i>Dinieithys, m</i> .....	232
<i>Conophyllum</i> .....	50	<i>Cypricardinia, f.</i> ...	188, 310	<i>Dinobolus, m</i> .....	110
<i>Conopterium, n</i> .....	43	<i>Cypricardites, m.</i> ...	188, 310	<i>Dionide, f</i> .....	217
<i>Conostichus, m</i> .....	25, 250	<i>Cyrtacanthus, m.</i> ...	231	<i>Diorychopora, f.</i> .....	267
<i>Conotubularia</i> .....	165	<i>Cyrtia, f.</i> .....	110	<i>Diphyphyllum, n.</i> ...	52, 267
<i>Constellaria</i> .....	50	<i>Cyrtina, f.</i> .....	110, 295	<i>Diplazites</i> .....	27
<i>Conularia, f.</i> .....	141, 299	<i>Cyrtoceras, n.</i> .....	166, 305	<i>Dipleura</i> .....	217
<i>Cornulites</i> .....	165	<i>Cyrtocerina, f.</i> .....	167	<i>Diplichnites, m</i> .....	217
<i>Copodus, m.</i> .....	320	<i>Cyrtodonta</i> .....	190	<i>Diplocaulus, m.</i> ...	323
<i>Cordaianthus, m</i> .....	250	<i>Cyrtolites, m.</i> .....	147, 301	<i>Diploceras, n</i> .....	168
<i>Cordaicarpus, m.</i> ...	250	<i>Cyrtoneilla, f.</i> .....	301	<i>Diplodus, m.</i> .....	232, 321
<i>Cordaistrobus, m</i> .....	250	<i>Cystiphyllum, n</i> .....	50, 266	<i>Diplograptus, m.</i> ...	52, 268
<i>Cordaites, m.</i> .....	25, 250	<i>Cystocrinus, m.</i> .....	75	<i>Diplophyllum</i> .....	52
<i>Cordylocrinus, m.</i> ...	281	<i>Cystodictya, f.</i> .....	290	<i>Diplostegium, n.</i> ...	27
<i>Cornulites, m.</i> .....	206, 313	<i>Cystopora, f.</i> .....	290	<i>Diplostylus, m.</i> ...	217
<i>Coronocrinus, m.</i> .....	74	<i>Cystostylus, m.</i> ...	267	<i>Diplotrypa, f.</i> .....	268, 290
<i>Coscinium, n</i> .....	96	<i>Cythere, f.</i> .....	215, 317	<i>Dipterocaris, f.</i> ...	325
<i>Coscinopora</i> .....	43	<i>Cytherellina, f.</i> .....	317	<i>Dipterus, m</i> .....	232
<i>Cotyledonocrinus, m.</i>	74	<i>Cytherina, f.</i> .....	215	<i>Discina, f.</i> .....	111, 295
<i>Crania, f.</i> .....	109, 295	<i>Cytherodon, m</i> .....	190	<i>Discites, m</i> .....	168, 305
<i>Craspedophyllum, n</i>	265	<i>Cytheropsis, f.</i> ...	215, 317	<i>Discolites</i> .....	301
<i>Crateripora</i> .....	290	<i>Cytoerinus, m</i> .....	76, 281	<i>Discophycus, n.</i> ...	251
<i>Crematopteris, f.</i> ...	25	<i>Dactylodus, m.</i> .....	232	<i>Discophyllum, n</i> .....	52
<i>Crepicephalus, m.</i> ...	215, 317	<i>Dactylophycus, n</i> ...	251	<i>Discosorus, m</i> .....	168
<i>Crepidophyllum</i> .....	265	<i>Dadoxylon, n</i> .....	26	<i>Discotrypa, f</i> .....	290
<i>Cricotus, m.</i> .....	323	<i>Dæmonocrinites.</i> ...	76	<i>Distacodus, m</i> .....	313
<i>Crinocystites, m.</i> ...	74	<i>Dalmania</i> .....	215	<i>Dithyrocaris, f</i> .....	217
<i>Crinosoma</i> .....	281	<i>Dalmanites, m.</i> ...	215, 317	<i>Dolabra, f.</i> .....	190
<i>Crisina, f</i> .....	290	<i>Danaëites, m.</i> .....	26, 251	<i>Dolatoerinus, m.</i> ...	77, 282
<i>Cromyocrinus, m.</i> ...	281	<i>Dania, f.</i> .....	267	<i>Dolichometopus, m</i>	217
<i>Crumenæcrinites</i> .....	74	<i>Dawsonella, f.</i> .....	147	<i>Dolichopterus, m</i> ...	217, 317
<i>Cruziana, f.</i> .....	26	<i>Dawsonia, f.</i> .....	51	<i>Donacirinites.</i> ...	77
<i>Cryphæus</i> .....	215	<i>Decadactylocrinites</i>	76	<i>Doryerinus, m.</i> ...	77, 282
<i>Cryptoceras</i> .....	166	<i>Decadocrinus</i> .....	281	<i>Drepanacanthus, m.</i>	232
<i>Cryptolithus</i> .....	215	<i>Dechenia, f.</i> .....	251	<i>Drepanodus, m.</i> ...	313
<i>Cryptoneilla, f.</i> ...	109, 295	<i>Dekayia, f.</i> .....	267	<i>Drymopora, f.</i> ...	268
<i>Cryptopora, f.</i> .....	97	<i>Deltodopsis, f.</i> ...	320	<i>Duncanella, f.</i> ...	52
<i>Ctenacanthus, m</i> .....	231, 320	<i>Deltodus, m</i> .....	232, 320	<i>Dyscritus, m.</i> ...	225
<i>Ctenocrinus, m</i> .....	74	<i>Delthyris</i> .....	110	<i>Dystactella, f.</i> ...	190
<i>Ctenodonta</i> .....	187	<i>Deltoptychius, m</i> ...	321	<i>Dystactophycus, n</i>	251
<i>Ctenodus, m.</i> .....	231, 320	<i>Dendrerpeton, n.</i> ...	240, 323	<i>Dystactospongia, f.</i>	260
<i>Ctenopetalus, m.</i> ...	231	<i>Dendrocrinus, m</i> ...	76, 281	<i>Eatonia, f.</i> .....	111
<i>Ctenoptychius, m.</i>	231, 320	<i>Dendrograptus, m.</i>	51, 267	<i>Ecculiomphalus, m</i>	147
<i>Cucullæa</i> .....	188	<i>Dendropora, f.</i> ...	51, 267	<i>Echinocaris, f.</i> ...	317
<i>Cuneamya, f.</i> .....	188, 310	<i>Dentalina, f</i> .....	43	<i>Echinocystites, m.</i>	77
<i>Cupellæcrinus</i> .....	74	<i>Dentalium, n</i> .....	147, 301	<i>Echinoecrinites, m</i>	77
<i>Cupulocrinus, m</i> .....	281	<i>Desmiodus, m</i> .....	232	<i>Echinognathus, m.</i>	317
<i>Cyathaxonia, f.</i> ...	50, 265	<i>Desmiophyllum, n</i>	251	<i>Echinus</i> .....	77
<i>Cyathocrinus, m.</i> ...	74, 281	<i>Dexiobia, f.</i> .....	190, 310	<i>Ectocynodon, m</i> ...	324
<i>Cyathophycus, n</i> .....	260	<i>Diadectes, m.</i> .....	323	<i>Ectosteorachis, m</i>	321
<i>Cyathophyllum, n</i> 50, 64,	265	<i>Diamesopora</i> .....	97	<i>Edaphosaurus, m.</i>	324
<i>Cyathopora</i> .....	50	<i>Dicelloccephalus, m.</i>	216, 317	<i>Edestes, m.</i> .....	233
<i>Cyathospongia, f</i> .....	260	<i>Dichoerinus, m.</i> ...	76, 282	<i>Edmondia, f.</i> ...	190-310
<i>Cybele</i> .....	215	<i>Dichograptus</i> .....	51	<i>Edrioaster, m</i> .....	77
<i>Cyclaster</i> .....	75	<i>Dicraniscus</i> .....	110	<i>Edriocrinus, m.</i> ...	77
<i>Cycloconcha, f.</i> ...	188	<i>Dicranograptus, m</i>	51	<i>Eichwaldia, f</i> .....	111
<i>Cyclocystoides, m</i> ...	75, 281	<i>Dicranophyllum, n</i>	251	<i>Elæacrinus.</i> .....	78
<i>Cyclolites, m</i> .....	50	<i>Dicranopora, f</i> .....	290	<i>Elasmophyllum, n</i>	268
<i>Cyclonema, n</i> .....	146, 301	<i>Dicranurus</i> .....	217	<i>Eleutheroerinus, m</i>	78
<i>Cyclopora, f.</i> .....	97	<i>Dictyoerinus, m</i> ...	77	<i>Elliptocephala</i> ...	217, 317
<i>Cyclopteris, f.</i> ...	26, 250	<i>Dictyolites</i> .....	26	<i>Elonichthys</i> .....	233
<i>Cyclora, f</i> .....	147, 301	<i>Dictyonema, n.</i> ...	51, 64, 267	<i>Embolophorus, m</i>	324
<i>Cyclostigma, n</i> .....	26, 251	<i>Dictyophyton, n</i> 26,	251, 260	<i>Emmonsia, f.</i> ...	52
<i>Cyclostoma</i> .....	147	<i>Dictyopteris, f.</i> ...	26	<i>Empedocles, m.</i> ...	324
<i>Cymatodus, m</i> .....	232	<i>Dictyostroma, n</i> ...	52, 64	<i>Encrinurus, m.</i> ...	217, 317
<i>Cymoglossa, f</i> .....	251	<i>Didymograptus, m</i>	52	<i>Endoceras, n</i> .....	168, 305
<i>Cyphaspis, f</i> .....	215	<i>Didymophyllum, n</i>	27, 251	<i>Endolobus</i> .....	168
<i>Cypricardella, f</i> .....	188, 310	<i>Dimetrodon, m</i> ...	323	<i>Endothyra, n</i> .....	261

	PAGE.		PAGE.		PAGE.
<i>Endymion</i> .....	217	<i>Gampsacanthus</i> , <i>m</i> .....	233	<i>Hipparionyx</i> .....	112
<i>Endymionia</i> , <i>f</i> .....	217	<i>Geisacanthus</i> , <i>m</i> .....	233	<i>Hippodophycus</i> , <i>n</i> .....	27
<i>Enoploura</i> , <i>f</i> .....	317	<i>Gennæocrinus</i> .....	282	<i>Hippothoa</i> .....	99
<i>Entolium</i> , <i>n</i> .....	191	<i>Gerephemera</i> , <i>f</i> .....	225	<i>Holocystites</i> , <i>m</i> .....	81, 283
<i>Eocidaris</i> , <i>f</i> .....	78	<i>Gervillia</i> , <i>f</i> .....	191	<i>Holometopus</i> , <i>m</i> .....	218
<i>Eocystites</i> , <i>m</i> .....	78	<i>Glauconome</i> , <i>f</i> .....	98, 291	<i>Holopea</i> , <i>f</i> .....	149, 301
<i>Eodon</i> , <i>m</i> .....	244	<i>Glossoceras</i> , <i>n</i> .....	168	<i>Holopella</i> , <i>f</i> .....	149, 301
<i>Eophyton</i> , <i>n</i> .....	27	<i>Glossograptus</i> .....	54	<i>Holoptychius</i> , <i>m</i> .....	234
<i>Eopteria</i> , <i>f</i> .....	191	<i>Glycerites</i> , <i>m</i> .....	314	<i>Homicanthus</i> .....	234
<i>Eosaurus</i> , <i>m</i> .....	241	<i>Glymmatacanthus</i> , <i>m</i> .....	233, 321	<i>Homalonotus</i> , <i>m</i> .....	218, 318
<i>Eoscorpius</i> , <i>m</i> .....	224, 319	<i>Glyptaster</i> , <i>m</i> .....	79, 283	<i>Homocrinus</i> , <i>m</i> .....	81, 283
<i>Eospongia</i> , <i>f</i> .....	43	<i>Glyptocrinus</i> , <i>m</i> .....	79, 283	<i>Homothetus</i> , <i>m</i> .....	225
<i>Eotrochus</i> , <i>m</i> .....	301	<i>Glyptocystites</i> , <i>m</i> .....	80	<i>Homotrypa</i> , <i>f</i> .....	292
<i>Eotrophonia</i> .....	313	<i>Glyptodendron</i> , <i>n</i> .....	251	<i>Hornera</i> , <i>f</i> .....	99
<i>Eozoon</i> , <i>n</i> .....	43	<i>Goniphoceras</i> , <i>n</i> .....	168, 305	<i>Hortholus</i> .....	306
<i>Ephemerites</i> , <i>m</i> .....	225, 319	<i>Gomphocystites</i> , <i>m</i> .....	80	<i>Houghtonia</i> .....	56
<i>Epicordylus</i> , <i>m</i> .....	324	<i>Goniasteroidocrinus</i> , <i>m</i> .....	80	<i>Huronia</i> , <i>f</i> .....	170, 307
<i>Equisetites</i> , <i>m</i> .....	27, 251	<i>Goniatites</i> , <i>m</i> .....	169, 306	<i>Hyboladodus</i> , <i>m</i> .....	234
<i>Equisetum</i> .....	27	<i>Gonioceras</i> , <i>n</i> .....	170	<i>Hybocrinus</i> , <i>m</i> .....	82
<i>Eremopteris</i> , <i>f</i> .....	27, 251	<i>Goniocælia</i> .....	112	<i>Hybocystites</i> , <i>m</i> .....	283
<i>Eretmocrinus</i> , <i>m</i> .....	78, 282	<i>Goniphora</i> , <i>f</i> .....	192, 311	<i>Hydnoceras</i> .....	170
<i>Eridophyllum</i> , <i>n</i> .....	53, 268	<i>Goniopteris</i> .....	251	<i>Hydreionocrinus</i> , <i>m</i> .....	82, 284
<i>Eridopora</i> , <i>f</i> .....	290	<i>Gordia</i> .....	27	<i>Hylerpeton</i> , <i>n</i> .....	241
<i>Erismacanthus</i> , <i>m</i> .....	233	<i>Gorgonia</i> , <i>f</i> .....	98, 291	<i>Hylonomus</i> , <i>m</i> .....	241, 324
<i>Erisocrinus</i> , <i>m</i> .....	78, 282	<i>Grammysia</i> , <i>f</i> .....	192	<i>Hymenophyllites</i> , <i>m</i> .....	27, 252
<i>Eryops</i> , <i>f</i> .....	324	<i>Granatocrinus</i> , <i>m</i> .....	80, 283	<i>Hyphasma</i> , <i>n</i> .....	241
<i>Eschara</i> , <i>f</i> .....	97	<i>Gratiocrinus</i> , <i>m</i> .....	81, 283	<i>Hyolithellus</i> , <i>m</i> .....	141
<i>Escharopora</i> , <i>f</i> .....	97, 290	<i>Graptodictya</i> , <i>f</i> .....	291	<i>Hyolithes</i> , <i>m</i> .....	141, 300
<i>Estheria</i> , <i>f</i> .....	317	<i>Graptolithus</i> , <i>m</i> .....	54, 244, 269	<i>Hypanthocrinites</i> .....	82
<i>Ethmophyllum</i> , <i>n</i> .....	53	<i>Gryphorhynchus</i> .....	192	<i>Ichnophycus</i> , <i>n</i> .....	28
<i>Eucalyptocrinus</i> , <i>m</i> .....	78, 282	<i>Guilielmites</i> , <i>m</i> .....	257	<i>Ichthycanthus</i> , <i>m</i> .....	324
<i>Euchasma</i> , <i>n</i> .....	191	<i>Gypidula</i> , <i>f</i> .....	112, 295	<i>Ichthyocrinus</i> , <i>m</i> .....	82, 284
<i>Euchondria</i> , <i>f</i> .....	191	<i>Gyracanthus</i> , <i>m</i> .....	233, 321	<i>Ichthyorachis</i> , <i>f</i> .....	99
<i>Eucladoocrinus</i> , <i>m</i> .....	94, 282	<i>Gyroceras</i> , <i>n</i> .....	170, 244, 306	<i>Icosidactylocrinites</i> .....	82
<i>Eugaster</i> , <i>m</i> .....	78	<i>Hadrocrinus</i> , <i>m</i> .....	81	<i>Idiophyllum</i> , <i>n</i> .....	252
<i>Eulima</i> .....	147	<i>Hadiophyllum</i> , <i>n</i> .....	56, 269	<i>Ilionia</i> , <i>f</i> .....	192
<i>Eumicrotis</i> .....	191	<i>Haimeophyllum</i> , <i>n</i> .....	56	<i>Ilænurus</i> , <i>m</i> .....	218, 318
<i>Eunema</i> , <i>n</i> .....	148, 301	<i>Hallia</i> , <i>f</i> .....	269	<i>Ilænus</i> , <i>m</i> .....	218, 318
<i>Eunemacanthus</i> , <i>m</i> .....	321	<i>Halionia</i> , <i>f</i> .....	27, 251	<i>Inachus</i> .....	149, 301
<i>Eunicites</i> , <i>m</i> .....	313	<i>Halysites</i> , <i>m</i> .....	56, 64, 244, 269	<i>Inocaulis</i> , <i>m</i> .....	56, 270
<i>Eumphalus</i> , <i>m</i> .....	148, 244, 301	<i>Haplocrinus</i> , <i>m</i> .....	81	<i>Inoceramus</i> .....	192
<i>Eupachyrinus</i> , <i>m</i> .....	79, 282	<i>Haplophlebius</i> , <i>n</i> .....	225	<i>Intrapora</i> , <i>f</i> .....	292
<i>Eupheria</i> , <i>f</i> .....	224, 319	<i>Harlania</i> , <i>f</i> .....	27	<i>Intricaria</i> , <i>f</i> .....	99, 292
<i>Euprops</i> , <i>f</i> .....	217	<i>Harpacodus</i> , <i>m</i> .....	233	<i>Iocrinus</i> , <i>m</i> .....	284
<i>Eurylepis</i> , <i>f</i> .....	233	<i>Harpes</i> , <i>m</i> .....	218	<i>Iphidea</i> , <i>f</i> .....	112
<i>Eurypterus</i> , <i>m</i> .....	217, 318	<i>Harpides</i> , <i>m</i> .....	218	<i>Ischadites</i> .....	43, 261
<i>Eurythorax</i> , <i>m</i> .....	241	<i>Helicotoma</i> , <i>f</i> .....	149, 301	<i>Ischyrinia</i> , <i>f</i> .....	192
<i>Eusarcus</i> , <i>m</i> .....	244, 318	<i>Heliodus</i> , <i>m</i> .....	233	<i>Isocardia</i> .....	192, 311
<i>Evactinopora</i> , <i>f</i> .....	97	<i>Heliolites</i> , <i>m</i> .....	56-269	<i>Isochilina</i> , <i>f</i> .....	219, 318
<i>Ezochoerhynchus</i> .....	191	<i>Heliophycus</i> , <i>n</i> .....	252	<i>Isotema</i> , <i>n</i> .....	149, 301
<i>Faviphyllum</i> , <i>n</i> .....	53	<i>Heliophyllum</i> , <i>n</i> .....	54, 244, 269	<i>Isotelus</i> , <i>n</i> .....	219, 318
<i>Favistella</i> , <i>f</i> .....	53, 268	<i>Helminthoidichnites</i> , <i>m</i> .....	218, 318	<i>Janassa</i> , <i>f</i> .....	321
<i>Favosites</i> , <i>m</i> .....	53, 64, 244, 268	<i>Helodectes</i> , <i>m</i> .....	324	<i>Knorria</i> , <i>f</i> .....	28
<i>Favositopora</i> .....	269	<i>Helodus</i> , <i>m</i> .....	233, 321	<i>Koninckia</i> , <i>f</i> .....	112, 295
<i>Fenestella</i> , <i>f</i> .....	97, 290	<i>Helopora</i> , <i>f</i> .....	98	<i>Kutorgina</i> , <i>f</i> .....	112, 295
<i>Fenestralia</i> , <i>f</i> .....	98	<i>Heterotrypa</i> , <i>f</i> .....	270	<i>Lambdodus</i> , <i>m</i> .....	234
<i>Ficoidites</i> .....	251	<i>Hemeristia</i> , <i>f</i> .....	225	<i>Lamellipora</i> , <i>f</i> .....	56
<i>Filicites</i> .....	27, 54, 251	<i>Hemicosmites</i> , <i>m</i> .....	81	<i>Lampteroocrinus</i> , <i>m</i> .....	82, 284
<i>Fissodus</i> , <i>m</i> .....	233	<i>Hemicrypturus</i> .....	218	<i>Leala</i> , <i>f</i> .....	219
<i>Fistulipora</i> , <i>f</i> .....	54, 269	<i>Hemicystites</i> , <i>m</i> .....	81	<i>Lecanocrinus</i> , <i>m</i> .....	82, 284
<i>Flabellaria</i> .....	27	<i>Hemipronites</i> .....	112, 295	<i>Lecracanthus</i> , <i>m</i> .....	234
<i>Flustra</i> , <i>f</i> .....	98	<i>Hemitrypa</i> , <i>f</i> .....	98, 291	<i>Lecythocrinus</i> .....	284
<i>Forbesiocrinus</i> , <i>m</i> .....	79, 282	<i>Heterocrinus</i> , <i>m</i> .....	81, 283	<i>Leda</i> .....	193
<i>Fucoides</i> .....	27	<i>Heterocystites</i> , <i>m</i> .....	81	<i>Leioclema</i> , <i>n</i> .....	292
<i>Fusispira</i> , <i>f</i> .....	148, 301	<i>Heterodictya</i> , <i>f</i> .....	99	<i>Leiodus</i> , <i>m</i> .....	243
<i>Fusilina</i> , <i>f</i> .....	43, 261	<i>Heterophrentis</i> , <i>f</i> .....	56	<i>Leiopteris</i> , <i>f</i> .....	193
<i>Fusus</i> .....	149	<i>Hindsia</i> , <i>f</i> .....	261	<i>Leiorhynchus</i> , <i>n</i> .....	112, 295
<i>Galium</i> .....	27			<i>Lepadocrinus</i> , <i>m</i> .....	82

PAGE.		PAGE.		PAGE.	
Leperditia, f. ....	219, 318	Lypopora, f. ....	99	Myelodactylus, m. ....	84, 284
Lepetopsis, f. ....	301	Lysorophus, m. ....	324	Mylacris, f. ....	226
Lepidechinus, m. ....	82	Machæracanthus, m. ....	235	Myrianites, m. ....	31, 253
Lepidesthes, f. ....	82, 284	Machairodus	314	Myrtillocrinus, m. ....	84
Lepidodidaris	82	Maclurea, f. ....	150, 302	Mytilarca, f. ....	197, 311
Lepidodendron, n. ....	28, 252	Macrocheilus, n. ....	151, 244, 302	Mytilus, m. ....	197
Lepidodiscus	82	Macrochilina, f. ....	302	Naiadites, .....	197
Lepidocystis, m. ....	252	Macrodon, m. ....	194, 311	Natica	154
Lepidolites, m. ....	261	Macropetalichthys, m. ....	235	Naticopsis, f. ....	154, 303
Lepidophloios, m. ....	29, 252	Macrostachya, f. ....	253	Nautilus, m. ....	171, 307
Lepidophyllum, n. ....	30, 252	Macrostylocrinus, m. ....	83, 284	Nebulipora, f. ....	58
Lepidostrobilus, m. ....	30, 253	Madrepora	57	Nelimenia	307
Lepidoxylon, n. ....	253	Malocystites, m. ....	83	Nemagraptus, m. ....	58
Lepocrinites	82	Mariacrinus, m. ....	83	Nemapodia, f. ....	31, 253
Leptacanthus	234	Marracanthus, m. ....	235	Nematophycus, n. ....	31
Leptæna, f. ....	112, 295	Marsupiocrinus, m. ....	83, 284	Nematophyllum, n. ....	253
Leptobolus, m. ....	113	Martinia, f. ....	115	Nematoxylon, n. ....	31
Leptocelia, f. ....	113	Matheria, f. ....	194	Nephropteris	31
Leptodomus, f. ....	193, 311	Mazonia, f. ....	224	Nereidavus, m. ....	314
Leptophlæum, n. ....	29	Mecolepis, f. ....	235	Nereites, m. ....	31, 253
Leptophractus, m. ....	234, 241,	Meekella, f. ....	115	Nereograptus, m. ....	58
	321, 324	Megalaspis, f. ....	220	Neriopteris, f. ....	31
Leptopora, f. ....	56, 64, 270	Megalograptus, m. ....	57	Neuropteris, f. ....	31, 253
Lescuropteris, f. ....	30, 253	Megalomus, m. ....	194, 311	Nicholsonia, f. ....	271
Lesleya, f. ....	253	Megalopteris, f. ....	31, 253	Nileus, m. ....	220
Libellula, f. ....	225	Megambonia, f. ....	194	Nipterocrinus, m. ....	84
Lichas, m. ....	220, 318	Meganteris	115	Nodosinella, f. ....	261
Lichenalia, f. ....	99, 292	Megaphyton, n. ....	31, 253	Næggerathia, f. ....	32, 254
Lichenocrinus, m. ....	82, 284	Megaptera	194	Nucleocrinus, m. ....	84
Licophycus, n. ....	30, 253	Megastentomum, n. ....	235	Nucleospira, f. ....	116, 296
Lima, f. ....	193	Megistocrinus, m. ....	83, 284	Nucula, f. ....	197, 311
Limaria, f. ....	56, 270	Melia	307	Nuculana, f. ....	198, 311
Limoptera, f. ....	193	Melocrinus, m. ....	83, 284	Nuculites, m. ....	198, 311
Lindstromia, f. ....	270	Melonites, m. ....	84	Nullipora, f. ....	43
Lingula, f. ....	113, 244, 295	Menocephalus, m. ....	220	Nuttainia	220
Lingulella, f. ....	115	Merista, f. ....	115	Nyassa, f. ....	198
Lingulepis, f. ....	115, 296	Meristella, f. ....	115, 296	Obolella, f. ....	116, 296
Lingulops, f. ....	115	Meristina, f. ....	116	Obolellina	116
Linipora	57	Mesodmodus, m. ....	235	Obolus, m. ....	116
Liognathus, m. ....	234	Mespilocrinus, m. ....	84	Odontocephalus	221
Lisgocaris	318	Metarmosaurus, m. ....	324	Odontochile	221
Lisgodus, m. ....	234	Metoptoma, f. ....	151, 302	Odontopteris, f. ....	33, 254
Listracanthus, m. ....	235	Miamia, f. ....	225	Oenites, m. ....	314
Lithentomum, n. ....	225	Michelinia, f. ....	57, 244, 271	Oestocephalus, m. ....	241
Lithophaga, f. ....	193, 311	Microceras, n. ....	152, 302	Ogygia, f. ....	221, 318
Lithostrotion, n. ....	57, 270	Microcyclus, m. ....	57	Oldhamia, f. ....	58
Lituities, m. ....	170, 307	Microdiscus, m. ....	220, 318	Olenellus, m. ....	221, 318
Littorina	150	Microdoma, f. ....	152	Olenus, m. ....	221
Loftusia, f. ....	261	Micronod	194	Oligocarpia, f. ....	254
Loganellus	220	Microspongia, f. ....	261	Oligoporus, m. ....	84, 284
Lonchocephalus	220	Millipora	57	Olivanites	84
Lonchopteris, f. ....	30	Millerella, f. ....	325	Ollacrinus	284
Lonsdaleia, f. ....	57	Milleria, f. ....	271	Omphalotrochus	154
Lophodus	235	Mitoclema, n. ....	292	Omphyma, f. ....	58, 272
Lophophyllum, n. ....	57, 270	Modiola, f. ....	194	Onchus	235
Loxonema, n. ....	150, 244, 302	Modiolopsis, f. ....	195, 311	Oncoceras, n. ....	172, 307
Lucina, f. ....	193, 311	Moliodomorphia, f. ....	195, 311	Onycha-ter, m. ....	84
Lumbriconereites, m. ....	314	Molgophis, m. ....	241	Onychocrinus, m. ....	84, 284
Lunatipora, f. ....	57	Monoceratium, n. ....	314	Onychodus, m. ....	235
Lunulicardium, n. ....	193, 311	Monograptus, m. ....	57, 271	Ophiacodon, m. ....	324
Lunulites	43	Monomerella, f. ....	116	Ophileta, f. ....	154, 303
Lycopodiolithes	253	Monopteria, f. ....	196	Opisthoptera	199
Lycopodites, m. ....	31, 253	Monotis, f. ....	196, 311	Oracanthus, m. ....	235, 321
Lyellia, f. ....	57, 270	Monotrypa, .....	271	Orbicula	116
Lyonsia	193	Monotrypella, f. ....	292	Orbiculoidea, f. ....	296
Lyrioerinus, m. ....	83, 284	Monticulipora, f. ....	57, 271, 292	Orbitulites	43
Lyriopecten, m. ....	193	Murchisonia, f. ....	152, 244, 302	Ormathicnus, m. ....	303
Lyrodesma, n. ....	193	Myalina, f. ....	196, 311	Ormoceras, n. ....	173



PAGE.	PAGE.	PAGE.
<i>Ptilocarpus</i> , <i>m</i> ..... 35, 256	<i>Sandalodus</i> , <i>m</i> ..... 238, 322	<i>Spirigera</i> ..... 133
<i>Ptilodictya</i> , <i>f</i> ..... 100, 293	<i>Sanguinolaria</i> , <i>f</i> ..... 202, 312	<i>Spirophyton</i> , <i>n</i> ..... 39, 259
<i>Ptilograptus</i> , <i>m</i> ..... 60, 272	<i>Sanguinolites</i> , <i>m</i> ..... 202, 312	<i>Spirorbis</i> , <i>m</i> ..... 207, 315
<i>Ptilonaster</i> ..... 89	<i>Saportea</i> , <i>f</i> ..... 257	<i>Spirula</i> ..... 178
<i>Ptilophyton</i> ..... 256	<i>Sarcinula</i> , <i>f</i> ..... 60, 272	<i>Spongia</i> ..... 44
<i>Ptilopora</i> , <i>f</i> ..... 100	<i>Sauripteris</i> ..... 238	<i>Sporangites</i> , <i>m</i> ..... 39, 259
<i>Ptychaspis</i> , <i>f</i> ..... 223, 319	<i>Sauropileura</i> , <i>f</i> ..... 241, 324	<i>Sporocystis</i> , <i>m</i> ..... 259
<i>Ptychodesma</i> , <i>n</i> ..... 202, 312	<i>Sauropus</i> , <i>m</i> ..... 241	<i>Staphylopteris</i> , <i>f</i> ..... 39, 259
<i>Ptychophyllum</i> , <i>n</i> ..... 60, 272	<i>Sævogyra</i> , <i>f</i> ..... 304	<i>Staurocephalites</i> , <i>m</i> ..... 315
<i>Ptyctodus</i> , <i>m</i> ..... 238	<i>Scalariopora</i> , <i>f</i> ..... 293	<i>Staurogriaptus</i> , <i>m</i> ..... 60
<i>Ptyonius</i> , <i>m</i> ..... 241	<i>Scalites</i> , <i>m</i> ..... 162	<i>Steganoecrinus</i> , <i>m</i> ..... 91, 287
<i>Ptyonodus</i> , <i>m</i> ..... 322	<i>Scaphioecrinus</i> , <i>m</i> ..... 91, 287	<i>Stellipora</i> , <i>f</i> ..... 60, 272
<i>Pugiunculus</i> ..... 142	<i>Scenella</i> , <i>f</i> ..... 142	<i>Stemmatodus</i> , <i>m</i> ..... 239
<i>Pupa</i> , <i>f</i> ..... 162, 304	<i>Scenellopora</i> , <i>f</i> ..... 293	<i>Stemmatopteris</i> , <i>f</i> ..... 259
<i>Pyanomya</i> , <i>f</i> ..... 312	<i>Schænaster</i> , <i>m</i> ..... 91	<i>Stenacanthus</i> , <i>m</i> ..... 239, 322
<i>Pygopterus</i> , <i>m</i> ..... 238, 241	<i>Schælerania</i> , <i>f</i> ..... 128	<i>Stenaster</i> , <i>m</i> ..... 91
<i>Pygorhynchus</i> , <i>n</i> ..... 89	<i>Schizoecrinus</i> , <i>m</i> ..... 91	<i>Stenopora</i> , <i>f</i> ..... 60
<i>Pyrenomoeus</i> , <i>m</i> ..... 202	<i>Schizodus</i> , <i>m</i> ..... 203, 312	<i>Stenopterodus</i> , <i>m</i> ..... 322
<i>Quenstedtia</i> ..... 60, 245, 272	<i>Schizopteris</i> ..... 36	<i>Stenoschisma</i> , <i>n</i> ..... 133
<i>Ramipora</i> , <i>f</i> ..... 293	<i>Schutzia</i> , <i>f</i> ..... 36, 257	<i>Stenothea</i> , <i>f</i> ..... 142
<i>Raniceps</i> ..... 241	<i>Scolithus</i> , <i>m</i> ..... 36, 257, 315	<i>Stephanocrinus</i> , <i>m</i> ..... 92, 287
<i>Raphistoma</i> , <i>n</i> ..... 162, 304	<i>Scenopendrites</i> , <i>m</i> ..... 36, 257	<i>Stereocrinus</i> , <i>m</i> ..... 287
<i>Rastrites</i> , <i>m</i> ..... 60	<i>Scyphia</i> ..... 44	<i>Sternbergia</i> , <i>f</i> ..... 39
<i>Receptaculites</i> , <i>m</i> ..... 43, 261	<i>Scyphocrinus</i> , <i>m</i> ..... 91, 287	<i>Stictopora</i> , <i>f</i> ..... 101, 293
<i>Remopleurides</i> , <i>m</i> ..... 223	<i>Scytalocrinus</i> ..... 287	<i>Stictoporella</i> ..... 293
<i>Renssæleria</i> , <i>f</i> ..... 124, 297	<i>Sedgwickia</i> , <i>f</i> ..... 203, 312	<i>Stigmæria</i> , <i>f</i> ..... 40, 259
<i>Retepora</i> , <i>f</i> ..... 100, 293	<i>Selaginites</i> , <i>m</i> ..... 36, 257	<i>Stigmærioides</i> , <i>m</i> ..... 40, 259
<i>Retioecrinus</i> , <i>m</i> ..... 90, 287	<i>Selenoides</i> ..... 44	<i>Stomatopora</i> , <i>f</i> ..... 294
<i>Retiograptus</i> , <i>m</i> ..... 60	<i>Semicoscinium</i> , <i>n</i> ..... 101	<i>Straparollina</i> , <i>f</i> ..... 162
<i>Retiolites</i> , <i>m</i> ..... 60	<i>Serpula</i> , <i>f</i> ..... 206, 315	<i>Straparollus</i> , <i>m</i> ..... 162, 304
<i>Retzia</i> , <i>f</i> ..... 124, 297	<i>Serpulites</i> , <i>m</i> ..... 206	<i>Streblopteria</i> , <i>f</i> ..... 204
<i>Rhabdaria</i> , <i>f</i> ..... 44	<i>Septopora</i> , <i>f</i> ..... 101	<i>Strephodes</i> ..... 272
<i>Rhabdichnites</i> ..... 223	<i>Shumardia</i> , <i>f</i> ..... 223	<i>Streptaxis</i> , <i>m</i> ..... 163
<i>Rhabdocarpus</i> , <i>m</i> ..... 36, 256	<i>Sicarius</i> ..... 322	<i>Streptelasma</i> , <i>n</i> ..... 61, 245, 272
<i>Rhachiopteris</i> , <i>f</i> ..... 36, 256	<i>Sidemina</i> ..... 309	<i>Streptoceras</i> , <i>n</i> ..... 178
<i>Rhachitonus</i> , <i>m</i> ..... 324	<i>Sigillaria</i> , <i>f</i> ..... 37, 257	<i>Streptorhynchus</i> , <i>n</i> ..... 134, 298
<i>Rhachura</i> , <i>f</i> ..... 319	<i>Sigillarioides</i> , <i>m</i> ..... 38, 258	<i>Striatopora</i> , <i>f</i> ..... 61, 245, 273
<i>Rhacophyllum</i> , <i>n</i> ..... 36, 256	<i>Siphonia</i> ..... 44	<i>Stricklandia</i> ..... 134
<i>Rhadinichthys</i> , <i>m</i> ..... 322	<i>Skenidium</i> , <i>n</i> ..... 128	<i>Stricklandinia</i> , <i>f</i> ..... 134, 298
<i>Rhinidictya</i> , <i>f</i> ..... 293	<i>Smithia</i> , <i>f</i> ..... 60, 272	<i>Strigilina</i> ..... 322
<i>Rhinipora</i> , <i>f</i> ..... 100	<i>Solenoula</i> , <i>f</i> ..... 258	<i>Strobilocyathites</i> , <i>m</i> ..... 92
<i>Rhizodus</i> , <i>m</i> ..... 238	<i>Solarium</i> ..... 162	<i>Strobitus</i> ..... 259
<i>Rhizograptus</i> , <i>m</i> ..... 272	<i>Solemya</i> ..... 204	<i>Stromatocerium</i> , <i>n</i> ..... 61, 261, 273
<i>Rhizolithes</i> ..... 36	<i>Solen</i> , <i>m</i> ..... 204	<i>Stromatopora</i> , <i>f</i> ..... 61, 261, 273
<i>Rhizomopteris</i> , <i>f</i> ..... 36	<i>Soleniscus</i> , <i>m</i> ..... 162, 304	<i>Strombodes</i> , <i>m</i> ..... 62, 273
<i>Rhizomorpha</i> , <i>f</i> ..... 257	<i>Solenocaris</i> ..... 223	<i>Strophalosia</i> , <i>f</i> ..... 135, 298
<i>Rhodocrinus</i> , <i>m</i> ..... 90, 287	<i>Solenocœilus</i> , <i>n</i> ..... 178	<i>Strophites</i> , <i>m</i> ..... 304
<i>Rhombopora</i> , <i>f</i> ..... 60	<i>Solenomya</i> , <i>f</i> ..... 204	<i>Strophodonta</i> , <i>f</i> ..... 135, 298
<i>Rhynchodus</i> , <i>m</i> ..... 238, 322	<i>Solenopleura</i> , <i>f</i> ..... 223, 319	<i>Strophomena</i> , <i>f</i> ..... 136, 299
<i>Rhynchonella</i> , <i>f</i> ..... 125, 297	<i>Solenopsis</i> , <i>f</i> ..... 204	<i>Strophonella</i> , <i>f</i> ..... 299
<i>Rhynchospira</i> ..... 128, 297	<i>Solenoula</i> , <i>f</i> ..... 258	<i>Strophostylus</i> , <i>m</i> ..... 163, 304
<i>Rhynchotreta</i> , <i>f</i> ..... 297	<i>Sorocladus</i> , <i>m</i> ..... 258	<i>Strotoecrinus</i> , <i>m</i> ..... 92, 288
<i>Rhynobolus</i> ..... 128	<i>Spathiocaris</i> , <i>f</i> ..... 319	<i>Stylaster</i> , <i>f</i> ..... 273
<i>Ribeiria</i> , <i>f</i> ..... 44	<i>Spatiopora</i> , <i>f</i> ..... 293	<i>Stylifer</i> ..... 163
<i>Rinodus</i> ..... 238	<i>Sphærexochus</i> , <i>m</i> ..... 223	<i>Styliola</i> , <i>f</i> ..... 300
<i>Romingeria</i> , <i>f</i> ..... 272	<i>Sphærocoryphe</i> , <i>f</i> ..... 223	<i>Subulites</i> , <i>m</i> ..... 163, 304
<i>Ropalonia</i> ..... 293	<i>Sphæroecrinus</i> ..... 91	<i>Synbathocrinus</i> , <i>m</i> ..... 92, 288
<i>Rotalia</i> , <i>f</i> ..... 44, 261	<i>Sphærocystites</i> , <i>m</i> ..... 91	<i>Synocladia</i> , <i>f</i> ..... 101, 294
<i>Rotella</i> , <i>f</i> ..... 304	<i>Sphærolites</i> , <i>m</i> ..... 60	<i>Syntrielasma</i> , <i>n</i> ..... 138
<i>Rotularia</i> ..... 316	<i>Sphenacodon</i> , <i>m</i> ..... 324	<i>Syringocrinus</i> , <i>m</i> ..... 92
<i>Rusichnites</i> , <i>m</i> ..... 223, 319	<i>Sphenophyllum</i> , <i>n</i> ..... 38, 258	<i>Syringodendron</i> , <i>n</i> ..... 40, 259
<i>Rusophycus</i> , <i>n</i> ..... 36, 257	<i>Sphenopteris</i> , <i>f</i> ..... 38, 258	<i>Syringolites</i> , <i>m</i> ..... 273
<i>Saccamina</i> , <i>f</i> ..... 261	<i>Sphenopterium</i> ..... 44	<i>Syringopora</i> , <i>f</i> ..... 62, 273
<i>Saccoecrinus</i> , <i>m</i> ..... 90, 287	<i>Sphenothallus</i> , <i>m</i> ..... 39	<i>Syringostroma</i> , <i>n</i> ..... 273
<i>Særichnites</i> , <i>m</i> ..... 178	<i>Spheropezium</i> , <i>n</i> ..... 242	<i>Syringothyris</i> , <i>f</i> ..... 138, 299
<i>Sagenaria</i> ..... 36	<i>Spirangium</i> , <i>n</i> ..... 259	<i>Syringoxylon</i> , <i>n</i> ..... 40
<i>Sagenella</i> , <i>f</i> ..... 100, 293	<i>Spirifera</i> , <i>f</i> ..... 128, 297	<i>Tæniaster</i> , <i>m</i> ..... 92, 288
<i>Salterella</i> , <i>f</i> ..... 206	<i>Spiriferina</i> , <i>f</i> ..... 133, 298	<i>Tæniodus</i> , <i>m</i> ..... 322



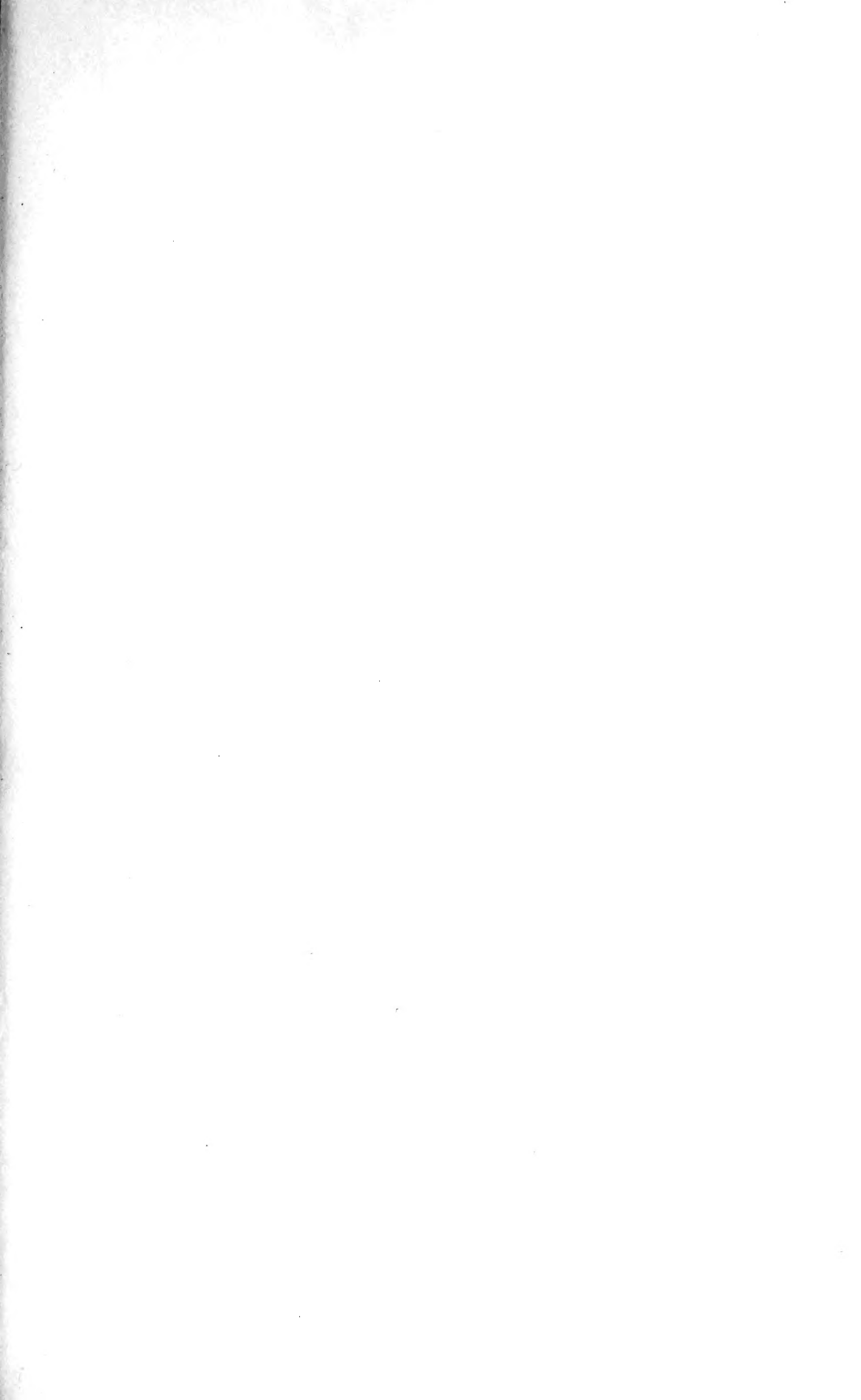
	PAGE.		PAGE.		PAGE.
Taeniophyllum, <i>n.</i>	259	Thysanocrinus, <i>m.</i>	93	Tubipora, <i>f.</i>	63
Tæniopora, <i>f.</i>	101	Tomodus, <i>m.</i>	322	Tuditanus, <i>m.</i>	242, 324
Tæniopteris, <i>f.</i>	40, 259	Trachomatichnus, <i>m.</i>	309	Turbo, <i>m.</i>	164, 304
Talarocrinus, <i>m.</i>	288	Trachydomia, <i>n.</i>	163	<i>Turbonilla</i>	164
Tanaodus, <i>m.</i>	239	Trachypora, <i>f.</i>	63, 273	Turritella, <i>f.</i>	164, 304
Taonurus, <i>m.</i>	259	Trachyum, <i>n.</i>	44	Ulodendron, <i>n.</i>	41, 260
Taxocrinus, <i>m.</i>	92, 288	<i>Tremanotus</i>	164, 304	<i>Ungulina</i>	205
Technocrinus, <i>m.</i>	92	Trematis, <i>f.</i>	139, 299	<i>Unio</i>	312
<i>Teleiocrinus</i>	288	Trematoceras, <i>n.</i>	309	Uphantænia, <i>f.</i>	41, 260, 261
Telephus, <i>m.</i>	223	<i>Trematocrinus</i>	93	Valvulina, <i>f.</i>	261
<i>Tellina</i>	204	Trematodiscus, <i>m.</i>	179, 309	Vanuxemia, <i>f.</i>	205, 312
Tellinomya, <i>f.</i>	204, 312	Trematopora, <i>f.</i>	101, 294	Vasocrinus, <i>m.</i>	93, 288
Tellinopsis, <i>f.</i>	205	Trematospira, <i>f.</i>	139, 299	Vaticinodus, <i>m.</i>	323
Temnocheilus, <i>n.</i>	178	Triarthrella, <i>f.</i>	223	Venustodus, <i>m.</i>	239
Tentaculites, <i>m.</i>	142, 300	Triarthrus, <i>m.</i>	223, 319	Vermipora, <i>f.</i>	63
Terataspis, <i>f.</i>	223	Trichomanites, <i>m.</i>	40	Vesicularia, <i>f.</i>	63
Teratichnus, <i>m.</i>	309	Trichophycus, <i>n.</i>	260	Vitulina, <i>f.</i>	140
Terebratulites	139	Trichospongia, <i>f.</i>	44	Walchia, <i>f.</i>	41, 260
Termes, <i>m.</i>	319	Trigonocarpum, <i>n.</i>	40, 260	Walcottia, <i>f.</i>	315
Tetradium, <i>n.</i>	62	Trigonodus, <i>m.</i>	239, 322	Waldheimia, <i>f.</i>	140
Tetraraptus, <i>m.</i>	62	Trigonotreta, <i>f.</i>	139	Whittleseya, <i>f.</i>	41, 260
<i>Textilaria</i>	261	Trimerella, <i>f.</i>	139	Xenocrinus, <i>m.</i>	288
Thaleops, <i>f.</i>	223	Trimerorhachis, <i>f.</i>	324	Xenoneura, <i>f.</i>	226
Thallistigma, <i>n.</i>	294	<i>Trimerus</i>	223	Xenophora, <i>f.</i>	164
Thamniscus, <i>m.</i>	101, 294	Trinucleus, <i>m.</i>	223, 319	Xylobius, <i>m.</i>	224
Thamnograptus, <i>m.</i>	63, 273	Triphylopteris, <i>f.</i>	260	Xystracanthus, <i>m.</i>	239
Thamnopora, <i>f.</i>	294	<i>Triptesia</i>	140, 299	Xystrodus, <i>m.</i>	239, 323
Theca, <i>f.</i>	142, 300	Trochita, <i>f.</i>	164, 304	Yoldia, <i>f.</i>	205, 312
Thecia, <i>f.</i>	63	Trochoceras, <i>n.</i>	179, 309	Zamites, <i>m.</i>	41, 260
Thecostegites, <i>m.</i>	63	Trochonema, <i>n.</i>	164, 304	Zaphrentis, <i>f.</i>	63, 245, 273
Thenaropus, <i>m.</i>	242	Trocholites, <i>m.</i>	179, 309	Zatrachys, <i>n.</i>	324
Theropleura, <i>f.</i>	324	Trochophyllum, <i>n.</i>	41, 260, 273	Zeacrinus, <i>m.</i>	93, 288
Thrinacodus, <i>m.</i>	239	<i>Trochus</i>	164	Zonites, <i>m.</i>	162
Thyrsidium, <i>n.</i>	242	Troostocrinus, <i>m.</i>	288	Zygospira, <i>f.</i>	140, 499
		Tropidoleptus, <i>m.</i>	140		

②

4058 4









QE            Miller, Samuel Almond  
725            The American palaeozoic  
M55            fossils

Physical &  
Applied Sci.

PLEASE DO NOT REMOVE  
CARDS OR SLIPS FROM THIS POCKET

---

UNIVERSITY OF TORONTO LIBRARY

---

